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=> d his full
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1.2
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L_3
                OR "FISCHER TIMOTHY J"/AU)
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L6
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L7
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                OR "BIOMERIEUX B V"/CS OR "BIOMERIEUX B V"/PA OR "BIOMERIEUX B
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                ESSAIS ET PROTEOMIQUE MARCY L ETOILE FR"/CS OR "BIOMERIEUX ENS
                LYON LYON 69364 FR"/CS OR "BIOMERIEUX ENSL LYON 69364 FR"/CS
                OR "BIOMERIEUX FR"/CS OR "BIOMERIEUX FR"/PA OR "BIOMERIEUX G M
                B H NUERTINGEN 7440 FED REP GER"/CS OR "BIOMERIEUX INC"/CS OR
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                 SA MARCY L ETOILE 69280 FR"/CS OR "BIOMERIEUX STELHYS"/CS OR
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X USA"/PA OR " E COAGULATION/CT

E E3+ALL

L8

32088 SEA ABB=ON PLU=ON COAGULATION+OLD, NT/CT E E12

E E3+ALL

2731 SEA ABB=ON PLU=ON COAGULANTS+OLD/CT

L9 32 SEA ABB=ON PLU=ON (L2 OR L3 OR L4 OR L5 OR L6 OR L7) AND (L8 L10 OR L9)

FILE 'REGISTRY' ENTERED AT 15:43:33 ON 14 JUL 2005 E TISSUE FACTOR/CN

"BIOMERIEUX STELHYS"/PA OR "BIOMERIEUX STELHYS FR"/CS OR

"BIOMERIEUX STELHYS FR"/PA OR "BIOMERIEUX USA"/CS OR "BIOMERIEU

L11 1 SEA ABB=ON PLU=ON "TISSUE FACTOR (BLOOD-COAGULATION)"/CN D SCA

L12 293 SEA ABB=ON PLU=ON (TISSUE (1A) FACTOR#)/CNS

FILE 'HCAPLUS' ENTERED AT 15:48:52 ON 14 JUL 2005

L13

14691 SEA ABB=ON PLU=ON (L11 OR L12) OR BLOOD(1A)COAGUL? (1A) (FACTO R?(1A) (3 OR III) OR FACTOR3# OR FACTORIII#) OR CEPHALOPLASTIN#
OR COAGULIN# OR FIBROOLET? OR IL (1A)PT(1A)HS OR NEOPLASTIN#
OR TISSUE (1A)FACTOR# OR THROMBOKININ OR THROMBOPLASTIN# OR THROMBOREL# OR TROMBOSTOP OR ZYMOPLASTIC

L14 12 SEA ABB=ON PLU=ON L10 AND L13

=> b hcap FILE 'HCAPLUS' ENTERED AT 15:52:22 ON 14 JUL 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 14 Jul 2005 VOL 143 ISS 3 FILE LAST UPDATED: 13 Jul 2005 (20050713/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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- L14 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:405393 HCAPLUS
- DN 142:2950
- ED Entered STN: 19 May 2004
- TI International multicenter international sensitivity index (ISI) calibration of a new human tissue factor thromboplastin reagent derived from cultured human cells
- AU Houdijk, W. P. M.; Van Den Besselaar, A. M. H. P.
- CS bioMerieux bv, Boxtel, Neth.
- SO Journal of Thrombosis and Haemostasis (2004), 2(2), 266-270 CODEN: JTHOA5; ISSN: 1538-7933
- PB Blackwell Publishing Ltd.
- DT Journal
- LA English
- CC 9-15 (Biochemical Methods)
 Section cross-reference(s): 1
- AB The international sensitivity index (ISI) of the first working standard of Simplastin HTF, a new human tissue factor thromboplastin derived from cultured human cells, has been assessed in a calibration exercise in two Canadian and five European labs. Calibrations against international reference prepns. (IRP) were performed for the manual method and six types of automated coagulometers that cover the majority of clotting endpoint principles in routine use. The ISI was method-dependent and varied between 1.03 and 1.29 when calibrated against rTF/95 (human IRP). The ISI was also dependent on the route of calibration. Compared with calibration against rTF/95, the ISIs obtained by calibration against RBT/90 (rabbit IRP) were on average 4.4% higher (P <

```
0.005). Considering the principle of "like vs. like", the ISIs obtained
     by calibration against rTF/95 should be preferred.
ST
     simplastin international sensitivity index calibration
     thromboplastin blood coagulation anticoagulant
     Anticoagulants
IT
     Blood analysis
       Blood coagulation
     Calibration
     Human
        (international multicenter international sensitivity index (ISI)
        calibration of new human tissue factor
        thromboplastin reagent derived from cultured human cells)
IT
     446277-18-5, Simplastin HTF
     RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST
     (Analytical study); BIOL (Biological study); USES (Uses)
        (international multicenter international sensitivity index (ISI)
        calibration of new human tissue factor
        thromboplastin reagent derived from cultured human cells)
IT
     9001-26-7, Prothrombin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (international multicenter international sensitivity index (ISI)
        calibration of new human tissue factor
        thromboplastin reagent derived from cultured human cells)
RE.CNT
              THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Bader, R; Thromb Haemost 1994, V71, P292 HCAPLUS
(2) Fairweather, R; Arch Pathol Laboratory Med 1998, V122, P768 HCAPLUS
(3) Hirsh, J; Chest 2001, V119, P8S HCAPLUS
(4) Poggio, M; Thromb Haemost 1989, V62, P868 HCAPLUS
(5) Poller, L; Laboratory Techniques in Thrombosis -- a Manual. ECAT Assay
    Procedures 1999, P45
(6) Rico-Lazarowski, A; Thromb Haemost 2001, V86(Suppl), PCD3185
(7) Roussi, J; Thromb Haemost 1994, V72, P698 HCAPLUS
(8) Tomenson, J; Thromboplastin Calibration and Oral Anticoagulant Control
    1984, P87
(9) Tripodi, A; Thromb Haemost 1992, V67, P42 HCAPLUS
(10) Tripodi, A; Thromb Haemost 1995, V74, P1368 HCAPLUS
(11) Tripodi, A; Thromb Haemost 1998, V79, P439 HCAPLUS
(12) Valdes-Camin, R; Blood Coagul Fibrinolysis 1994, V5, P617 HCAPLUS
(13) van den Besselaar, A; Thromb Haemost 1993, V70, P794 HCAPLUS (14) van den Besselaar, A; Thromb Haemost 1999, V81, P66 HCAPLUS (15) van den Besselaar, A; Thromb Haemost 2000, V84, P664 HCAPLUS
(16) van den Besselaar, A; Thromb Haemost 2002, V88, P459 HCAPLUS
(17) WHO Expert Committee on Biological Standardization; WHO Techn Report
    Series 1999, V889, P64
L14 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     2003:697159 HCAPLUS
DN
     139:194022
ED
     Entered STN: 05 Sep 2003
TT
     Method for diagnosing and monitoring hemostatic dysfunction, severe
     infection and systematic inflammatory response syndrome
IN
     Toh, Cheng Hock; Tejidor, Liliana; Neisheim, Mike; Jones,
     Gregory
PA
     Biomerieux, Inc., USA
SO
     PCT Int. Appl., 62 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
TC
     ICM G01N033-53
CC
     9-16 (Biochemical Methods)
     Section cross-reference(s): 7, 14
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                          KIND
                                  DATE
                                              APPLICATION NO.
                                                                       DATE
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     WO 2003073099
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                                               EP 2003-711279
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PRAI US 2002-359932P
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     US 2002-363073P
                            P
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     US 2002-396392P
                            Р
                                   20020717
     US 2002-404652P
                            P
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     WO 2003-US5980
                                   20030227
CLASS
 PATENT NO.
                  CLASS PATENT FAMILY CLASSIFICATION CODES
 WO 2003073099
                  ICM
                          G01N033-53
 WO 2003073099
                  ECLA
                          G01N033/92
 US 2003228625
                          435/007.100; 436/071.000
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                          G01N033/92
                          2G045/CA26; 2G045/DA62; 2G045/FA40; 2G045/FB01;
 JP 2005519267
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                          4B063/QR41; 4B063/QR69; 4B063/QS12; 4B063/QS24;
                          4B063/QS36; 4B063/QX01; 4B063/QX02; 4C084/AA02;
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                          4C084/NA14; 4C084/ZA312; 4C084/ZA532; 4C084/ZA542;
                          4C084/ZA892; 4C084/ZB052; 4C084/ZB112; 4C084/ZB332;
                          4C084/ZB352; 4C084/ZB382; 4C084/ZC202
AΒ
     A method for diagnosing and monitoring subjects for hemostatic
     dysfunction, severe infection and systematic inflammatory response
     syndrome is provided whereby lipoproteins are examined for abnormalities,
     particularly for prothrombinase enhancement, through quant. and qual.
ST
     diagnosing monitoring hemostatic dysfunction severe infection systematic
     inflammatory syndrome
IT
     Lipoproteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
     (Biological study); USES (Uses)
         (Abnormal; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
IT
     Apolipoproteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
     (Biological study); USES (Uses)
         (B; method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (C-reactive; method for diagnosing and monitoring hemostatic
        dysfunction, severe infection and systematic inflammatory response
        syndrome)
IT
     Infection
        (Severe; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
IT
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
         (V: method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
TT
     Blood coagulation
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(disorder; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
TT
    Blood coagulation
        (disseminated intravascular; method for diagnosing and monitoring
        hemostatic dysfunction, severe infection and systematic inflammatory
        response syndrome)
ĨΤ
    Lipoproteins
    RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (intermediate-d.; method for diagnosing and monitoring hemostatic
        dysfunction, severe infection and systematic inflammatory response
        syndrome)
IT
    Lipoproteins
    RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (low-d.; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
ΙT
    Binders
    Blood analysis
    Blood plasma
    Blood serum
     Chromatography
    Diagnosis
    Human
    NMR spectroscopy
     Samples
     Sepsis
     Surface area
     Thrombus
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
IT
    Lipoproteins
     RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
IT
    Antibodies and Immunoglobulins
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
TT
     Inflammation
        (systemic inflammatory response syndrome; method for diagnosing and
        monitoring hemostatic dysfunction, severe infection and systematic
        inflammatory response syndrome)
ΙT
    Lipoproteins
     RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (very-low-d.; method for diagnosing and monitoring hemostatic
        dysfunction, severe infection and systematic inflammatory response
        syndrome)
ΙT
     Lipoproteins
     RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (β-; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
IT
     9002-04-4, Thrombin
     RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
     use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
IT
     9035-58-9, Tissue factor (blood-coagulation)
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
IT
     9001-26-7, Prothrombin 72162-96-0, Prothrombinase
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
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(Biological study); USES (Uses)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
              THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Yu; US 20020150534 A1 2002 HCAPLUS
L14 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
     2003:435205 HCAPLUS
DN
     139:19321
ED
     Entered STN: 06 Jun 2003
     Method for predicting an increased likelihood of antiphospholipid syndrome
     in a patient using phospholipids and waveform analysis
     Ortel, Thomas L.; Su, Zuowei; Braun, Paul J.; Tejidor, Liliana
IN
PA
SO
     U.S. Pat. Appl. Publ., 47 pp.
     CODEN: USXXCO
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LА
     English
     ICM G01N033-53
IC
INCL 435007900
     9-5 (Biochemical Methods)
     Section cross-reference(s): 14, 15
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                            APPLICATION NO.
                                                                    DATE
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                                                               20020628
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     US 2003104493
                         A1
                                20030605 US 2002-185186
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CLASS
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 US 2003104493
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                        4B063/QR56; 4B063/QS25; 4B063/QS34; 4B063/QX02
     A method for predicting that an individual has antiphospholipid syndrome
     or an increased likelihood of having antiphospholipid syndrome, includes:
     (a) providing a test sample from an individual; (b) combining the test
     sample with phospholipids; (c) directing a light beam at the test sample
     and monitoring light scattering or transmittance over time so as to
     provide a time-dependent measurement profile; (d) determining if a value or a
     slope at or over a particular time in the time-dependent measurement
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profile is beyond a corresponding predetd. value or slope threshold; and
if the value or slope in the time-dependent measurement profile is beyond
the predetd. threshold, then determining that the individual has
antiphospholipid syndrome or an increased risk of antiphospholipid
syndrome. The phospholipids can be provided as part of a coagulation
reagent, or as part of a reagent where coagulation is not activated.
Confirmatory assays for particular antibodies to phospholipid binding
proteins can be performed.
antiphospholipid syndrome diagnosis phospholipid waveform analysis;
antibodies phospholipid light scattering time profile
Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
   (C-reactive; antiphospholipid syndrome diagnosis using phospholipids
   and waveform anal.)
Apolipoproteins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
DGN (Diagnostic use); PUR (Purification or recovery); ANST (Analytical
study); BIOL (Biological study); PREP (Preparation); USES (Uses)
   (H, antibodies to, immunoassay for; antiphospholipid syndrome diagnosis
   using phospholipids and waveform anal.)
Antibodies and Immunoglobulins
RL: AMX (Analytical matrix); ANST (Analytical study)
   (IgG; antiphospholipid syndrome diagnosis using phospholipids and
   waveform anal.)
Samples
   (anal. of; antiphospholipid syndrome diagnosis using phospholipids and
   waveform anal.)
Cardiolipins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study);
   (antibodies to, immunoassay for; antiphospholipid syndrome diagnosis
   using phospholipids and waveform anal.)
Blood analysis
Human
Immunoassay
Light scattering
Liposomes
Optical transmission
Risk assessment
Time
   (antiphospholipid syndrome diagnosis using phospholipids and waveform
Antiphospholipid syndrome
RL: ADV (Adverse effect, including toxicity); ANT (Analyte); BSU
(Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical
study); BIOL (Biological study); USES (Uses)
   (antiphospholipid syndrome diagnosis using phospholipids and waveform
   anal.)
Antibodies and Immunoglobulins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
(Biological study); USES (Uses)
   (antiphospholipid syndrome diagnosis using phospholipids and waveform
Phosphatidylcholines, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
ANST (Analytical study); BIOL (Biological study); USES (Uses)
   (antiphospholipid syndrome diagnosis using phospholipids and waveform
Phosphatidylethanolamines, biological studies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
ANST (Analytical study); BIOL (Biological study); USES (Uses)
   (antiphospholipid syndrome diagnosis using phospholipids and waveform
   anal.)
```

IT

IT

TТ

IT

ΙT

TT

IT

IT

TT

IT

Phosphatidylinositols

```
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
IT
     Phosphatidylserines
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
IT
     Phospholipids, biological studies
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
ΙT
    Analysis
     Process automation
        (automated anal., for thrombosis and hemostasis testing;
        antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
IT
    Algorithm
        (automated; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
TT
    Analysis
        (clin., APTT assay; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     Lipoproteins
     RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
     use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (complexes, with C-reactive protein; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
IT
     Autoimmune disease
        (determining increased likelihood of having; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
ΙT
     Blood coagulation
        (disorder; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
ΙT
     Blood coagulation
        (disseminated intravascular, patient not having; antiphospholipid
        syndrome diagnosis using phospholipids and waveform anal.)
IT
     Metals, biological studies
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (divalent, reagent, phospholipids as part of; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
IT
     Immunoassay
        (enzyme-linked immunosorbent assay, confirmatory assay for
        antiphospholipid antibodies; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
ΙT
     Immunoassay
        (latex agglutination test, confirmatory assay for antiphospholipid
        antibodies; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
IT
     Therapy
        (monitoring; antiphospholipid syndrome diagnosis using phospholipids
        and waveform anal.)
TТ
     Simulation and Modeling, physicochemical
        (neural network; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     Platelet (blood)
        (neutralization test; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
ΙT
     Anticoagulants
        (oral; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
ΙT
     Proteins
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
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DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study);
    USES (Uses)
        (phospholipid-binding, antibodies to; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
IT
        (phospholipids added in absence of; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
IT
     Coagulants
        (phospholipids as part of; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     Reagents
    RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (phospholipids as part of; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     Spectrometers
        (photooptical coagulation analyzers; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
TΤ
    Thrombosis
        (predicting increased risk of; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
IT
    Daboia russelli
        (reagent containing liposomes and venom of; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
TT
    Halides
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (reagent, phospholipids as part of; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
TТ
     Mammalia
        (reagents from tissue of; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
    Animal tissue
     Brain
     Placenta
        (reagents from; antiphospholipid syndrome diagnosis using phospholipids
        and waveform anal.)
TТ
        (snake, reagent containing liposomes and Russel's viper; antiphospholipid
        syndrome diagnosis using phospholipids and waveform anal.)
TT
    Abortion
        (spontaneous; antiphospholipid syndrome diagnosis using phospholipids
        and waveform anal.)
IT
     Lupus erythematosus
        (systemic, determining increased likelihood of having; antiphospholipid
        syndrome diagnosis using phospholipids and waveform anal.)
IT
     Embolism
        (thromboembolism; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     163663-01-2, Innovin
                           229637-90-5, Simplastin L
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
TT
     107-73-3, Phosphorylcholine
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (in determination of C-reactive protein; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
IT
     535969-18-7
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (reagent containing liposomes and; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
ΙT
     9035-58-9, Blood-coagulation factor
     III 72162-96-0, Thromboplastin
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RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (reagent, phospholipids as part of; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
     9001-26-7, Prothrombin
IT
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study);
     USES (Uses)
        (time reagent, phospholipids as part of; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
ΙT
     537732-37-9 537732-38-0 537732-39-1 537732-40-4
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; method for predicting an increased
        likelihood of antiphospholipid syndrome in a patient using
        phospholipids and waveform anal.)
     ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
L14
     2002:966970 HCAPLUS
AN
DN
     138:21824
     Entered STN: 22 Dec 2002
ED
     Method for detecting a lipoprotein-acute phase protein complex and
     predicting an increased risk of system failure or mortality
IN
     Fischer, Timothy J.; Downey, Colin; Nesheim, Mike; Samis, John
     A.; Tejidor, Liliana; Toh, Cheng Hock; Walker, John B.
PA
SO
     U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U.S. Ser. No. 591,642,
     abandoned.
     CODEN: USXXCO
DT
     Patent
LА
     English
     ICM G01N031-00
IC
INCL 702022000
     9-16 (Biochemical Methods)
     Section cross-reference(s): 14
FAN.CNT 6
     PATENT NO.
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                                DATE
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                                                                    DATE
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     US 2002193949
                         A1
                                20021219 US 2001-19087
                                                                     20011219
                                          JP 1996-501365
     JP 11507131
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                                 19990622
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                         B2
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                          Α
                                 20000808
                                             US 1997-859773
                                                                     19970521
                         B1
     US 6321164
                                           US 1997-1647
                                20011120
                                                                     19971231
                         A1 20050413 EP 2004-25887
     EP 1522860
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                                             US 2001-850255
                          A1
                                 20020214
                                                                     20010507
     US 6564153
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                                 20030513
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                                             WO 2001-US18611
                                                                     20010608
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                                 20011220
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                          А3
                                20030206
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     JP 2004503254
                          T2
                                 20040205
                                             JP 2002-510942
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     US 2001053959
                          A1
                                 20011220
                                             US 2001-918214
                                                                     20010730
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                                 20050524
                         B1
                                             US 2003-377228
                                                                     20030228
                         A1
                                             US 2004-884293
     US 2004248308
                                 20041209
                                                                     20040702
PRAI US 1995-477839
                          A1
                                 19950607
     US 1997-859773
                         A2
                                19970521
     US 1997-1647
                         A2
                                19971231
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US 1999-244340
                                 19990204
                           A2
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                                 20000609
                           B2
     WO 2001-US18611
                          W
                                 20010608
     WO 1996-US8905
                           W
                                 19960605
     EP 2000-913371
                          A3
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     US 2000-517496
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     US 2003-377228
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                                 20030228
CLASS
 PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
                        G01N031-00
 US 2002193949
                 ICM
                 INCL
                         702022000
 US 2002193949
                 NCL
                         702/022.000
                        G01N033/86; G01N033/92
                 ECLA
                         702/022.000; 702/028.000; 702/030.000; 702/032.000;
 US 6101449
                 NCL
                         703/011.000
                 ECLA
                        G06F019/00A2
                         702/022.000; 702/028.000; 702/030.000; 702/032.000;
 US 6321164
                 NCL
                         703/011.000
                 ECLA
                         G06F019/00A2
 US 2002019706
                         702/022.000; 436/069.000; 702/019.000; 702/030.000;
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                         702/032.000
                         G01N033/49B; G06F019/00A2
                 ECLA
 JP 2004503254
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                        2G045/AA25; 2G045/BA20; 2G045/CA26; 2G045/FA11;
                         2G045/FB01; 2G045/GC10; 2G045/GC12; 2G045/JA01;
                         4B063/QA01; 4B063/QA19; 4B063/QQ03; 4B063/QR01;
                         4B063/QR48; 4B063/QS26; 4B063/QS31; 4B063/QX01
US 2001053959
                         702/022.000
                 NCL.
                 ECLA
                         C07K016/18; G06F019/00A2
                         702/022.000; 702/019.000; 702/030.000; 702/032.000;
US 6898532
                 NCL
                         703/011.000
 US 2004248308
                 NCL
                         436/069.000
     A method for diagnosing a condition of a patient involves the steps of (a)
     adding one or more reagents to a test sample from a patient, the test
     samples comprising at least part of a blood sample from the patient, in order to cause formation of a complex comprising at least one acute phase
    protein at least one human lipoprotein, while causing substantially no
     fiber polymerization; (b) measuring the formation of the complex over time so as
     to derive a time-dependent measurement profile, and (c) determining a slope
     and/or total change in the time-dependent measurement profile, so as to
     diagnose a condition of the patient. A greater formation of the complex
     is correlated to increased probability of death of the patient.
ST
     lipoprotein acute phase protein complex predicting risk system
IT
     Proteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
     (Biological study); USES (Uses)
        (C-reactive; lipoprotein-acute phase protein complex detection and
        predicting an increased risk of system failure or mortality)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (SAA (serum amyloid A); lipoprotein-acute phase protein complex
        detection and predicting an increased risk of system failure or
        mortality)
IT
     Lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (high-d.; lipoprotein-acute phase protein complex detection and
        predicting an increased risk of system failure or mortality)
IT
     Lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (intermediate-d.; lipoprotein-acute phase protein complex detection and
        predicting an increased risk of system failure or mortality)
ΙT
     Blood analysis
       Blood coagulation
     Chylomicrons
     Complexation
     Diagnosis
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Human
     Optical transmission
        (lipoprotein-acute phase protein complex detection and predicting an
        increased risk of system failure or mortality)
IT
     Apolipoproteins
     Fibrins
     Lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (lipoprotein-acute phase protein complex detection and predicting an
        increased risk of system failure or mortality)
IT
     Lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (low-d.; lipoprotein-acute phase protein complex detection and
        predicting an increased risk of system failure or mortality)
IT
     Lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (very-low-d.; lipoprotein-acute phase protein complex detection and
        predicting an increased risk of system failure or mortality)
IT . 60-00-4, EDTA, biological studies 68-04-2, Sodium citrate 7439-89-6,
                              7439-95-4, Magnesium, biological studies
     Iron, biological studies
     7439-96-5, Manganese, biological studies 7440-39-3, Barium, biological
     studies 7440-70-2, Calcium, biological studies 8001-27-2, Hirudin
     9000-94-6, Antithrombin 9005-49-6, Heparin, biological studies
     71142-71-7, PPack 72162-96-0, Thromboplastin 93050-91-0,
     I2581
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (lipoprotein-acute phase protein complex detection and predicting an
        increased risk of system failure or mortality)
L14 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     2000:553781 HCAPLUS
DN
     133:132103
    Entered STN: 11 Aug 2000
ED
    A method and apparatus for predicting the presence of hemostatic
     dysfunction in a patient sample
    Toh, Cheng Hock; Downey, Colin; Fischer, Timothy J.
IN
    Akzo Nobel N.V., Neth.
PA
SO
    PCT Int. Appl., 111 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
IC
     ICM G01N033-86
CC
     9-1 (Biochemical Methods)
     Section cross-reference(s): 14
FAN.CNT 6
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     WO 2000046603
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         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
     CA 2362055
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                               20000810
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                                                                  20000204
     EP 1147423
                                           EP 2000-913371
                                                                  20000204
                         A1
                               20011024
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                         B1
                               20041110
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
     JP 2002541431
                         T2
                               20021203
                                           JP 2000-597634
                                                                  20000204
                                           AU 2000-34833
    AU 774889
                         B2
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                                                                  20000204
     AU 2000034833
                         A5
                               20000825
    AT 282208
                         Ε
                               20041115
                                           AT 2000-913371
                                                                  20000204
                               20050413
    EP 1522860
                                          EP 2004-25887
                         A1
                                                                  20000204
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY
                         Т3
                               20050516
                                           ES 2000-913371
     ES 2231167
                                                                  20000204
     US 2004248308
                               20041209
                                           US 2004-884293
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                         A1
PRAI US 1999-244340
                         Α
                               19990204
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20000204
    EP 2000-913371
                         A3
    WO 2000-US2987
                         W
                               20000204
    US 2003-377228
                         A1
                               20030228
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
PATENT NO.
                ____
WO 2000046603 ICM
                      G01N033-86 ·
US 2004248308 NCL
                      436/069.000
   A method is disclosed for predicting the presence of hemostatic
    dysfunction. At least one time-dependent measurement on an unknown sample
    is performed and a resp. property of the sample is measured over time so
    as to derive a time-dependent measurement profile. One or more predictor
    variables, including initial slope, are defined which sufficiently define
    the data of the time-dependent measurement profile. A model is then
    derived that represents the relationship between an abnormality and a set
    of predictor variables. Subsequently, the model is utilized to predict
    hemostatic dysfunction.
    app hemostatic dysfunction
ST
TΥ
    Fibrinogen degradation products
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (DD; a method and apparatus for predicting presence of hemostatic
        dysfunction in a patient sample)
IT
    Acidosis
    Apparatus
    Blood analysis
      Blood coagulation
    Blood plasma
    Diagnosis
    Disease, animal
    Hypoxia, animal
    Infection
    Liver, disease
    Neoplasm
    Parturition
    Platelet (blood)
    Pregnancy
    Spectroscopy
    Surgery
    Therapy
    Thrombus
     Transplant rejection
        (a method and apparatus for predicting presence of hemostatic dysfunction in
        a patient sample)
IT
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (a method and apparatus for predicting presence of hemostatic dysfunction in
        a patient sample)
TΤ
    Artery
        (aorta, aneurysm rupture; a method and apparatus for predicting presence of
        hemostatic dysfunction in a patient sample)
IT
    Blood coagulation
        (disseminated intravascular; a method and apparatus for predicting presence
        of hemostatic dysfunction in a patient sample)
IT
    Hemostatics
        (dysfunction; a method and apparatus for predicting presence of hemostatic
        dysfunction in a patient sample)
IT
     Inflammation
        (systemic inflammatory response syndrome; a method and apparatus for
        predicting presence of hemostatic dysfunction in a patient sample)
ΤT
    Injury
        (trauma; a method and apparatus for predicting presence of hemostatic
        dysfunction in a patient sample)
IT
     9001-26-7, Prothrombin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (a method and apparatus for predicting presence of hemostatic dysfunction in
        a patient)
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72162-96-0, Thromboplastin
TT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (a method and apparatus for predicting presence of hemostatic dysfunction in
        a patient sample)
     7439-93-2, Lithium, biological studies
IT
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (overdose; a method and apparatus for predicting presence of hemostatic
        dysfunction in a patient sample)
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Astion; Arch Pathol Lab Med 1992, V116, P995 MEDLINE
(2) Givens; US 5708591 A 1998
(3) Hoffman; Organon Teknika 1990, P3 MEDLINE
(4) Pohl; Haemostasis 1994, V24, P325 MEDLINE
    ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
L14
AN
     2000:368697 HCAPLUS
DN
     132:345127
ED
     Entered STN: 04 Jun 2000
     Devices and methods for performing blood coagulation assays by
TΤ
     piezoelectric sensing
     Wu, Jogin R.; Moreno, Mario
TN
     Akzo Nobel N.V., Neth.
PA
SO
     PCT Int. Appl., 40 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
     ICM G01N033-00
TC
CC
     9-1 (Biochemical Methods)
FAN.CNT 1
     PATENT NO.
                                             APPLICATION NO.
                                                                     DATE
                         KIND
                                 DATE
                         _ _ _ _
PΙ
     WO 2000031529
                          A1
                                 20000602
                                             WO 1999-US27287
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RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
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                                 20010313
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     US 6200532
                           B1
                                           EP 1999-960444
                                 20011010
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     EP 1141699
                          A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE. FI
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                           Α1
     WO 1999-US27287
                                 19991117
CLASS
 PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 WO 2000031529
                 ICM
                        G01N033-00
                        G01N027/00B1B; G01N033/49B
 WO 2000031529
                 ECLA
 US 6200532
                 NCL
                         422/073.000; 073/064.410; 073/064.420; 073/064.430;
                         436/069.000
                 ECLA
                        G01N027/00B1B; G01N033/49B
AB
     A device and method for performing blood coagulation assays, particularly
     prothrombin times and activated partial thromboplastin times and
     other clotting parameters are disclosed. The device comprises a
     disposable strip (figures 1, 2 and 4) (containing a sample inlet (8) for
     sample delivery, a capillary channel for driving force, and a reaction
     chamber (1) with an appropriate dry reagent for a specific assay) and a
     piezoelec. sensor (3). The device could also include a heating element for temperature control, and a magnetic bender (2). The magnetic bender is
     driven by an electromagnetic field generator (6) and is attached onto a
     piezoelec. film (3) in contact with the blood sample. An elec. signal
     generated at the piezo film is characterized by its frequency and
     amplitude due to the movement of the attached metal film. The signal
     collected at the site of the film represents the process of a biochem.
     reaction in the reaction chamber, while the blood sample proceeds to the
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point at which clot formation starts.

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ST
    blood coagulation assay piezoelec sensor
TΤ
    Membranes, nonbiological
        (asym.; devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
ΙT
    Blood analysis
      Blood coagulation
    Capillary tubes
    Energy transfer
    Filters
    Heaters
     IR sources
     Interferometry
    Mirrors
     Piezoelectric sensors
        (devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
IT
    Reagents
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
IT
     Fluoropolymers, uses
     RL: DEV (Device component use); USES (Uses)
        (devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
IT
     Lenses
        (focusing; devices and methods for performing blood coagulation assays
        by piezoelec. sensing)
IT
     Polymers, uses
     RL: DEV (Device component use); USES (Uses)
        (polysulfonates, asym. membrane of; devices and methods for performing
        blood coagulation assays by piezoelec. sensing)
IT
     9002-05-5, Thromboplastin
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (activated partial thromboplastin time; devices and methods
        for performing blood coagulation assays by piezoelec. sensing)
IT
     12047-27-7, Barium Titanium oxide, uses 12626-81-2, Lead-zirconate-
     titanate 24937-79-9, Polyvinylidene fluoride 37349-19-2,
     Lead-magnesium-niobate
     RL: DEV (Device component use); USES (Uses)
        (devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
IT
     9001-26-7, Prothrombin
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (time; devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
RE.CNT
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Meller; US 5892144 A 1999 HCAPLUS
(2) Siegal; US 4450375 A 1984
(3) Siegal; US 4629926 A 1986
L14 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
    1999:464135 HCAPLUS
DN
     131:85163
ΕD
     Entered STN: 29 Jul 1999
    A method for predicting an abnormal level of clotting proteins using
ΤI
    neural network simulation
IN
    Braun, Paul; Givens, Thomas B.; Fischer, Timothy J.
PA
     Akzo Nobel N.V., Neth.
     PCT Int. Appl., 94 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
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G01N033-49; G01N033-86; G06F019-00

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TC

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9-16 (Biochemical Methods)
    Section cross-reference(s): 7, 14
FAN.CNT 6
    PATENT NO.
                        KIND
                              DATE
                                          APPLICATION NO.
                                                                DATE
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                        _ _ _ _
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                                          ______
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                        A1
                                          WO 1998-US27865
PΤ
    WO 9934208
                               19990708
                                                            19981230
        W: AU, CA, JP, KR, US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
    JP 11507131
                        T2
                              19990622
                                          JP 1996-501365
                                                                19960605
                       B2
                                          JP 1997-501365
    JP 3534415
                               20040607
                                                                19960605
    US 6321164
                       B1
                              20011120 US 1997-1647
                                                               19971231
                       AA 19990708 CA 1998-2316361
    CA 2316361
                                                               19981230
                       A1 19990719 AU 1999-19503
A1 20001011 EP 1998-964342
    AU 9919503
                                                               19981230
                                         EP 1998-964342
    EP 1042669
                                                                19981230
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
    JP 2002500360
                        Т2
                              20020108
                                          JP 2000-526808
                                                                19981230
                       A1 20011220
                                          US 2001-918214
    US 2001053959
                                                               20010730
                      A
PRAI US 1995-477839
                             19950607
                       A2
    US 1997-1647 ·
                              19971231
    WO 1996-US8905
                        W
                              19960605
                       A2
    US 1997-859773
                               19970521
    WO 1998-US27865
                       W
                              19981230
    US 2000-517496
                              20000302
                       A1
CLASS
               CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                IC G01N033-49IC G01N033-86IC
WO 9934208
                                     G01N033-86IC G06F019-00
WO 9934208
               ECLA G01N033/49B
              NCL
US 6321164
                       702/022.000; 702/028.000; 702/030.000; 702/032.000;
                       703/011.000
                ECLA
                       G06F019/00A2
US 2001053959 NCL
                       702/022.000
                ECLA C07K016/18; G06F019/00A2
    A method is disclosed for predicting the presence of an abnormal level of
    one or more proteins in the clotting cascade from at least one
    time-dependent measurement profile. At least one time-dependent
    measurement on an unknown sample is performed and a resp. property of the
    sample is measured over time so as to derive a time-dependent measurement
    profile. A set of a plurality of predictor variables are defined which
    sufficiently define the data of the time-dependent measurement profile. A
    model is then derived that represents the relationship between the
    abnormality and the set of predictor variables. Subsequently, the model
    is utilized to predict which protein or proteins in the clotting cascade
    are at an abnormal level, with the prediction being a better prediction
    than clot time alone. Neural networks using self-organizing feature maps
    and learning vector quantization were used to analyze optical data from
    clin. coagulation tests. Self-organizing feature maps using an
    unsupervised learning algorithm were trained with data from normal donors,
    patients with abnormal levels of coagulation proteins and patients
    undergoing anticoagulant therapy. Specimen categories were
    distinguishable in these maps with varying levels of resolution A supervised
    neural network method, learning vector quantization, was used to train
    maps to classify coagulation data. These networks showed sensitivity
    greater than 0.6 and specificity greater than 0.85 for detection of
    several factor deficiencies and heparin.
ST
    clotting protein abnormality prediction neural network simulation; blood
    coagulation factor abnormality prediction
IT
    Proteins, specific or class
    RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (clotting; predicting abnormal level of clotting proteins using neural
       network simulation)
IT
    Blood
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ED

ΤI

Entered STN: 09 Jun 1999

```
(disease, congenital or acquired; predicting abnormal level of clotting
        proteins using neural network simulation)
ΙT
     Blood coagulation
        (extrinsic; predicting abnormal level of clotting proteins using neural
        network simulation)
ΙT
     Blood coagulation
        (intrinsic; predicting abnormal level of clotting proteins using neural
        network simulation)
IT
     Simulation and Modeling, biological
        (neural network; predicting abnormal level of clotting proteins using
        neural network simulation)
IT
     Anticoaqulants
        (oral, in known blood samples; predicting abnormal level of clotting
        proteins using neural network simulation)
TΤ
     Blood analysis
       Blood coagulation
     Simulation and Modeling, biological
     Therapy
     Thrombosis
        (predicting abnormal level of clotting proteins using neural network
        simulation)
IT
     Fibrinogens
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (reagents; predicting abnormal level of clotting proteins using neural
        network simulation)
IT
     72162-96-0, Thromboplastin
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (APTT reagents; predicting abnormal level of clotting proteins using
        neural network simulation)
IT
     9002-04-4, Thrombin
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (TT reagents; predicting abnormal level of clotting proteins using
        neural network simulation)
TT
     9005-49-6, Heparin, analysis
     RL: ANT (Analyte); ARU (Analytical role, unclassified); ANST (Analytical
     study)
        (in known blood samples; predicting abnormal level of clotting proteins
        using neural network simulation)
IT
     9001-24-5, Blood coagulation factor V
                                             9001-25-6, Blood coagulation
     factor VII
                  9001-26-7, Blood coagulation factor II 9001-27-8, Blood
     coagulation factor VIII 9001-28-9, Blood coagulation factor IX
     9001-29-0, Blood coagulation factor X
                                             9001-30-3, Blood coagulation
     factor XII
                 9013-55-2, Blood coagulation factor XI
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (predicting abnormal level of clotting proteins using neural network
        simulation)
IT
     229637-90-5, Simplastin L
                                229638-70-4, Platelin L
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (predicting abnormal level of clotting proteins using neural network
        simulation)
RE.CNT
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Fischer; 1997
(2) Givens; 1998
(3) Grossman; 1992
L14
    ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
ΑN
     1999:354324 HCAPLUS
DN
     130:349368
```

Blood coagulation monitoring device with liquid crystal and gradient

غ و بير

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heater
IN
     Moreno, Mario; Wu, Jogin R.
PΑ
     Akzo Nobel N.V., Neth.
SO
     U.S., 17 pp.
     CODEN: USXXAM
DT
     Patent
LΑ
     English
     ICM G01N033-86
IC
INCL 436069000
CC
    9-1 (Biochemical Methods)
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                  DATE
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PΙ
     US 5908786
                                19990601
                                           US 1997-989561
                                                                   19971212
                         Α
     WO 9930166
                         A1
                                19990617
                                           WO 1998-US26453
                                                                   19981211
        W: AU, CA, JP, KR, US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
     AU 9918211
                         A1
                                19990628
                                            AU 1999-18211
                                                                   19981211
PRAI US 1997-989561
                         Α1
                                19971212
     WO 1998-US26453
                          W
                                19981211
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
US 5908786
                ICM
                       G01N033-86
                INCL
                        436069000
US 5908786
                 NCL
                        436/069.000; 073/064.410; 073/064.430; 422/055.000;
                        422/058.000; 422/073.000; 422/101.000; 422/102.000;
                        436/164.000; 436/165.000; 436/177.000; 436/178.000
                 ECLA
                       G01N033/86
WO 9930166
                       G01N033/86
                 ECLA
AΒ
     A device and method are disclosed for determining whether or not an individual's
     blood coagulation time is in a normal or abnormal range, and is
     particularly suitable for measuring prothrombin time and activated partial
     thromboplastin time coagulation values. The device includes a
     housing with an area for receiving a sample, a capillary channel or
     elongated area with an absorbent material, and a gradient heater. Liquid
     crystal and a coagulation agent can be disposed within the device to mix
     with a sample added to the device. The mixture passes along the capillary
     channel or absorbent material and stops moving when the sample has
     clotted. Due to the gradient heater and liquid crystal, the mixture may or
     may not change color, depending upon whether the individual has an
     abnormally short, normal, or abnormally long clot time.
ST
     blood coagulation time analyzer liq crystal; gradient heater blood
     coagulation time analyzer
IT
     Phospholipids, biological studies
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (blood clotting reagent; blood coagulation monitoring device with liquid
        crystal and gradient heater)
TT
     Analytical apparatus
     Blood analysis
      Blood coagulation
     Liquid crystals
     Membrane filters
        (blood coagulation monitoring device with liquid crystal and gradient
        heater)
ΙT
     Reagents
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (blood coagulation monitoring device with liquid crystal and gradient
        heater)
ΙT
     Capillary tubes
        (channels; blood coagulation monitoring device with liquid crystal and
        gradient heater)
IT
     Electric heaters
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(gradient heaters; blood coagulation monitoring device with liquid
        crystal and gradient heater)
IT
    Heaters
        (gradient; blood coagulation monitoring device with liquid crystal and
        gradient heater)
TТ
    72162-96-0, Thromboplastin
    RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (blood clotting reagent; blood coagulation monitoring device with liquid
       crystal and gradient heater)
RE.CNT
             THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Burgess, D; IEEE/IRPS 1984
(2) Cusak; US 5302348 1994
(3) Cusak; US 5372946 1994
(4) Davis; US 5058999 1991
(5) Dribbon; US 5678566 1997
(6) Fleuren, E; IEEE/IRPS 1983
(7) Gavin; US 5534226 1996 HCAPLUS
(8) Hillman; US 4963498 1990 HCAPLUS
(9) Hillman; US 5140161 1992 HCAPLUS
(10) Hillman; US 5144139 1992 HCAPLUS
(11) Hillman; US 5164598 1992 HCAPLUS
(12) Hillman; US 5204525 1993 HCAPLUS
(13) Hillman; US 5300779 1994 HCAPLUS
(14) Oberhardt; US 4849340 1989 HCAPLUS
(15) Phillips; US 5135549 1992 HCAPLUS
L14
    ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
    1998:682605 HCAPLUS
ΔN
DN
    129:299887
ED
    Entered STN: 28 Oct 1998
ΤI
    Method and apparatus for optimizing assay sequencing on a random access
    clinical laboratory instrument so as to reduce reagent cross-contamination
    problems
IN
    Givens, Thomas B.; Hunley, Charles W.; Fischer, Timothy J.;
    Bowling, Regina J.
PA
    Akzo Nobel N.V., Neth.
    PCT Int. Appl., 27 pp.
SO
    CODEN: PIXXD2
рπ
    Patent
    English
LΑ
    ICM G01N001-36
IC
    ICS G01N035-00
     9-1 (Biochemical Methods)
     Section cross-reference(s): 7, 47
FAN.CNT 1
                              DATE
    PATENT NO.
                        KIND
                                         APPLICATION NO.
                                                                DATE
                               -----
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                                           -----
PΤ
    WO 9845679
                               19981015
                                          WO 1998-US7246
                                                                 19980407
                        A1
        W: AU, CA, JP, KR, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
    AU 9868983
                                           AU 1998-68983
                        A1
                               19981030
                                                                 19980407
                       A2
PRAI US 1997-841983
                               19970408
                               19980407
    WO 1998-US7246
                        W
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                      _____
 WO 9845679
                ICM
                       G01N001-36
                ICS
                       G01N035-00
                ECLA
                      G01N035/00
WO 9845679
    A method and apparatus are disclosed for optimizing the sequence of assays on
    an automated random access instrument so as to reduce reagent
    cross-contamination problems. A common vehicle for reagent
     cross-contamination is the reagent probe surface which transfers reagents
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Gitomer 10/663449 Applicant for the various tests. When a plurality of assays are run on a single sample, an initial best path (order of assays) is identified, after which the iterative process of looking for a better alternative begins. process involves the application of a knowledge base concerning relationships associated with random access cross-contamination, to search the state space. The search strategy for optimizing the steps involved in performing three assays (activated partial thromboplastin time, prothrombin time, and heparin) on an automated analyzer is shown. clin analyzer assay optimization cross contamination; blood coagulation automated assay optimization Blood coagulation Coaqulation (assays; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems) Analytical apparatus (automated; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems) Fibrinogens RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

TT Computer application

(expert systems; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

TT Blood analysis

ST

IT

ΙT

IT

(method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

IT 9002-05-5, Thromboplastin

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(activated partial time coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

9005-49-6, Heparin, analysis

RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)

(anti-Xa coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

тт 9001-91-6, Plasminogen 60202-16-6, Protein 9000-94-6, Antithrombin III

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

9002-04-4, Thrombin IT 9001-26-7, Prothrombin

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(time coagulation assay; method and apparatus for optimizing assay sequencing on a random access clin. laboratory instrument so as to reduce reagent cross-contamination problems)

- THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT RE
- (1) Coville; US 4695430 A 1987
- (2) Manabe; US 4971913 A 1990 (3) Mimura; US 5100622 A 1992
- (4) Zakowski; US 4908320 A 1990

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ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
L14
     1997:603023 HCAPLUS
AN
     127:246047
DN
ED
     Entered STN: 22 Sep 1997
     Properties of optical data from activated partial thromboplastin
TI
     time and prothrombin time assays
ΑU
     Braun, Paul J.; Givens, Thomas B.; Stead, Andrew G.; Beck, Lisa R.; Gooch,
     Sheila A.; Swan, Robert J.; Fischer, Timothy J.
CS
     Organon Teknika Corporation, Durham, NC, 27712, USA
     Thrombosis and Haemostasis (1997), 78(3), 1079-1087
     CODEN: THHADQ; ISSN: 0340-6245
PB
     Schattauer
DT
     Journal
LА
     English
CC
     13-5 (Mammalian Biochemistry)
     Section cross-reference(s): 9
     Changes in characteristics of optical transmittance data from coagulation
AR
     assays were examined as a function of concentration of coagulation proteins or
     anticoagulants. Transmittance data were collected for activated partial
     thromboplastin time (APTT) and prothrombin time (PT) assays from:
     1) plasmas prepared by mixing normal plasmas with deficient plasmas to give
     varying levels of coagulation proteins; 2) plasmas containing added heparin;
     and 3) 200 specimen plasmas that were also assayed for fibrinogen,
     coagulation factors, and other components. Optical profiles were
     characterized using a set of parameters describing onset and completion of
     coagulation, magnitude of signal change, rate of coagulation and other
     properties. Results indicated that parameters other than those typically
     reported for APTT and PT are associated with individual deficiencies, but
     that diagnosis of specimen status on the basis of optical data is complex.
     These results suggest possibilities for expanded interpretation of PT/APTT
     optical data for clin. or research applications.
     blood anticoagulant thrombosis coagulation factor spectroscopy
ST
     Anticoaqulants
     Blood analysis
       Blood coagulation
        (optical data from activated partial thromboplastin time and
        prothrombin time assays)
IT
     Blood-coagulation factors
     Fibrinogens
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
        (optical data from activated partial thromboplastin time and
        prothrombin time assays)
     9000-94-6, Antithrombin
                              9001-24-5, Blood-coagulation factor V
     9001-25-6, Blood-coagulation factor VII 9001-26-7, Prothrombin
     9001-27-8, Factor VIII 9001-28-9, Factor IX 9001-29-0, Factor X
     9001-30-3, Blood-coagulation factor XII 9002-05-5,
     Thromboplastin 9013-55-2, Blood-coagulation factor XI
     9035-58-9, Thromboplastin
                                 72162-96-0,
     Thromboplastin
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
        (optical data from activated partial thromboplastin time and
        prothrombin time assays)
     ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     1994:529275 HCAPLUS
DN
     121:129275
ED
     Entered STN: 17 Sep 1994
     Properties of a new prothrombin time reagent based on recombinant
TI
     tissue factor and synthetic phospholipids
ΑU
     Kolde, Hans Juergen; Hawkins, P.; Tejidor, L.; Denzler, B.;
     Ramirez, I.
     Baxter Diagn., Unterschleissheim, D-85716, Germany
SO
     Klinisches Labor (1993), 39(7/8), 511-21
     CODEN: KLLAEA; ISSN: 0941-2131
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DТ
    Journal
LA
    German
CC
     9-15 (Biochemical Methods)
AB
    The use of recombinant human tissue factor permits the
     standardized production of thromboplastin reagents (Innovin, (I),
     Baxter Diagnostics). I, which is produced from synthetic phospholipids
     and recombinant tissue factor, has several advantages
     in comparison to conventional thromboplastins. Its turbidity is
    at least 10 fold less, and it does not tend to sediment. A better
    precision can therefore be achieved. In comparison to various other
     reagents, which were studied in parallel, it is less sensitive to heparin.
    Due to the excellent factor sensitivity of I, a better correlation between
     extrinsic factor concentration and prothrombin time is achieved in comparison to
    other sensitive thromboplastins. The results of I and British
    comparative thromboplastin (BCT) are very similar and very close
     to the mean values of factors II, VII and X in patients with stable oral
    anticoagulation.
    prothrombin time reagent recombinant tissue factor;
     phospholipid prothrombin time reagent; thromboplastin reagent
     recombinant tissue factor
ΙT
    Blood coagulation
        (determination of, prothrombin time reagent for, recombinant tissue
        factor and synthetic phospholipids in)
IT
     Phospholipids, uses
    RL: USES (Uses)
        (in prothrombin time reagent)
ΙT
     9035-58-9, Tissue factor
    RL: ANST (Analytical study)
        (human recombinant, in prothrombin time reagent)
L14 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AΝ
    1991:531408 HCAPLUS
DN
    115:131408
ED
    Entered STN: 05 Oct 1991
ΤI
    Method of monitoring reagent delivery in a scanning spectrophotometer
IN
    Driscoll, Richard Cornelius; Fischer, Timothy J.
PA
    AKZO N. V., Neth.
SO
    PCT Int. Appl., 15 pp.
    CODEN: PIXXD2
DT
    Patent
    English
LΑ
    ICM G01N021-00
IC
    ICS C08L089-00
    9-5 (Biochemical Methods)
CC
FAN.CNT 1
    PATENT NO.
                               DATE
                                           APPLICATION NO.
                                                                 DATE
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PΤ
    WO 9108461
                               19910613
                                           WO 1990-US7068
                        A1
                                                                 19901203
        W: AU, CA, FI, GR, JP, KR, US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
    US 5068181
                                           US 1989-443953
                                                                 19891201
                        Α
                               19911126
    AU 9169512
                         A1
                               19910626
                                           AU 1991-69512
                                                                 19901203
    AU 655577
                         B2
                               19950105
    EP 502983
                               19920916
                                           EP 1991-901116
                                                                 19901203
                         A1
    EP 502983
                        B1
                               19960828
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
    AT 142018
                              19960915
                                          AT 1991-901116
                        Ē
                                                                19901203
    ES 2095310
                         Т3
                               19970216
                                           ES 1991-901116
                                                                 19901203
    CA 2069887
                         C
                               20040210
                                           CA 1990-2069887
                                                                 19901203
                        T2
    JP 05502723
                              19930513
                                          JP 1991-501583
                                                                 19911218
    JP 2902108
                        B2 19990607
    FI 9202478
                        Α
                                                                 19920529
                              19920529
                                           FI 1992-2478
    FI 101575
                        B1
                               19980715
PRAI US 1989-443953
                               19891201
                         Α
    WO 1990-US7068
                               19901203
                         Α
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CLASS

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CLASS PATENT FAMILY CLASSIFICATION CODES
PATENT NO.
WO 9108461
                ICM
                       G01N021-00
                       C08L089-00
                ICS
                        435/013.000; 356/039.000; 436/056.000; 436/069.000;
US 5068181
                NCL
                        436/164.000; 436/166.000; 436/172.000; 436/800.000
AR
    A method for measuring the concentration of a reagent in a reaction mixture
    comprises: adding dye to a reagent until the dye is at a given concentration in
    the reagent; mixing the reagent with a specimen to form a reaction mixture,
    wherein the specimen comprises a component which reacts with the reagent
    to form a reaction product; measuring the formation of reaction product at
    a first spectral region; measuring the concentration of dye in the reaction mixture
    at a second spectral region in which the dye has an optical
    characteristic, such as absorption or fluorescence, the second spectral
    region being different from the first spectral region; and determining the
    concentration of the reagent in the reaction mixture based on the concentration of dye
    measure. In a further aspect of the invention there is provided a reagent
     containing a dye useful in the above method. Patent Blue VF was added to
     thromboplastin at 1.15 mg/L for a final concentration at '0.75 mg/L. A
     1-2% increase in prothrombin clotting occurred when the dye was added. No
    difference in the shape of the waveform at 565 nm was detected when dye
    was present, nor did the dye affect clot formation determination
ST
    reagent monitoring dye spectrophotometer; blood clotting assay reagent
    monitoring
IT
    Blood analysis
        (reagent monitoring in spectrophotometric, dyes for)
ΙŢ
    Blood coagulation
        (reagents for, monitoring of, in spectrophotometer, dyes for)
IT
    Chemicals
        (reagents, monitoring, in spectrophotometer, dyes for)
TТ
    Spectrometers
        (scanning, reagent monitoring in, dyes for)
ΙT
     81-88-9, Rhodamine B
    RL: ANST (Analytical study)
        (for calcium chloride monitoring in blood spectrophotometry)
TТ
     129-17-9, Patent Blue VF
    RL: ANST (Analytical study)
        (for reagent monitoring in spectrophotometer)
    9002-04-4, Thrombin 9002-05-5, Thromboplastin
TT
                                                       10043-52-4,
    Calcium chloride, biological studies
    RL: ANST (Analytical study)
        (monitoring, in spectrophotometer, dyes for)
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Page 1

=> b reg FILE 'REGISTRY' ENTERED AT 15:45:26 ON 14 JUL 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 13 JUL 2005 HIGHEST RN 854992-86-2 DICTIONARY FILE UPDATES: 13 JUL 2005 HIGHEST RN 854992-86-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

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L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
     9035-58-9 REGISTRY
ED
     Entered STN: 16 Nov 1984
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
     Cephaloplastin
CN
     Coaqulin
CN
CN
     Coagulin (enzyme)
CN
     Excel
CN
     Excel S
CN
     Fibrolet
     IL-PT HS
CN
CN
     Neoplastin
CN
     Procoagulant tissue factor
     Thrombokinin
CN
CN
     Thromboplastin
     Thromboplastin C
CN
CN
     Thromboplastin FS
     Thromborel
CN
CN
     Tissue factor (blood-coagulation)
CN
     Tissue thromboplastin
CN
     Trombostop
CN
     Zymoplastic substance
DR
     9023-20-5
MF
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CT
     COM, MAN
        N Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CHEMCATS, CHEMLIST, CIN, DDFU, DIOGENES,
LC
     STN Files:
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DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PROMT,

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TOXCENTER, USPAT2, USPATFULL
          (*File contains numerically searchable property data)
      Other Sources:
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          (**Enter CHEMLIST File for up-to-date regulatory information)
 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
             3707 REFERENCES IN FILE CA (1907 TO DATE)
              193 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             3715 REFERENCES IN FILE CAPLUS (1907 TO DATE)
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      ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
L2
RN
      9002-04-4 REGISTRY
ED
      Entered STN: 16 Nov 1984
CN
      Thrombin (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
      Blood-coagulation factor II, activated
 CN
      Blood-coagulation factor IIa
CN
 CN
     E.C. 3.4.21.5
 CN
     E.C. 3.4.4.13
     Factor IIa
 CN
 CN
      Thrombase
CN
      Thrombin JMI
     Thrombin-C
CN
     Thrombinar
 CN
     Thrombofort
CN
 CN
     Thrombostat
 CN
      Topical
CN
      Tropostasin
      8050-02-0, 8059-56-1, 9014-41-9, 105881-84-3, 53028-63-0
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MF
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CI
      COM, MAN
LC
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        CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA,
        MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PATDPASPC, PIRA, PROMT,
        RTECS*, TOXCENTER, USPAT2, USPATFULL
          (*File contains numerically searchable property data)
      Other Sources: EINECS**, TSCA**
          (**Enter CHEMLIST File for up-to-date regulatory information)
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              925 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
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      FILE 'REGISTRY' ENTERED AT 08:20:14 ON 15 JUL 2005
T.1
               1 SEA ABB=ON PLU=ON 9035-58-9
                 E THROMBIN/CN
             1 SEA ABB=ON PLU=ON THROMBIN/CN
544 SEA ABB=ON PLU=ON THROMBIN/CNS
1.3
                  E FIBRIN/CN
L4
             148 SEA ABB=ON PLU=ON FIBRIN/CNS
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            8993 SEA ABB=ON PLU=ON L1 OR BLOOD (1A) COAGULAT? (1A) (FACTORIII OR
L5
                  FACTOR3 OR FACTOR (1A) (III OR 3)) OR CEPHALOPLASTIN# OR
                  COAGULIN# OR FIBROLET OR IL (1A) (PTHS OR PT(1A) HS) OR NEOPLASTI
```

```
N# OR TISSUE (1A) FACTOR# OR THROMBOKININ#
           6652 SEA ABB=ON PLU=ON THROMBOPLASTIN### OR THROMBOREL# OR
L6
                TROMBOSTOP OR ZYMOPLASTIC (1A) SUBSTANCE?
L7
          33755 SEA ABB=ON PLU=ON L2 OR THROMBIN# OR BLOOD (1A) COGULAT? (1A) (F
                ACTORII# OR FACTOR2 OR FACTOR2A OR FACTOR(1A) (II# OR 2 OR 2A))
                OR THROMBASE OR THROMBINAR# OR THROMBOFORT OR THROMBOSTAT# OR
                TROPOSTATIN#
T.8
          70652 SEA ABB=ON PLU=ON FACTOR(1A)(II# OR 2 OR 2A)
L9
                QUE ABB=ON PLU=ON L3
L10
                QUE ABB=ON PLU=ON L4
          18729 SEA ABB=ON PLU=ON FIBRIN
L11
                E FIBRIN/CT
                E E3+ALL
                E E2+ALL
L12
           8211 SEA ABB=ON PLU=ON FIBRINS+OLD/CT
                E E8+ALL
          18223 SEA ABB=ON PLU=ON FIBRINOGENS+OLD, NT/CT
L13
                E TISSUE FACTOR/CT
                E TISSUE FACTORS/CT
                E THROMBIN/CT
                E E3+ALL
L14
          18071 SEA ABB=ON PLU=ON THROMBIN/CT
                E FIBRIN/CT
                E E3+ALL
             59 SEA ABB=ON PLU=ON "E.C.3.4.21.5" OR "E.C.3.4.4.13" OR
L15
                "EC3.4.21.5" OR "EC3.4.4.13" OR (E(1A)C OR EC OR ENZYME (1A)
                CLASS?) (1A) ("3.4.21.5" OR "3.4.4.13")
                E FISCHER T/AU
            143 SEA ABB=ON PLU=ON ("FISCHER T"/AU OR "FISCHER T J"/AU)
L16
                E FISCHER TIM/AU
L17
             24 SEA ABB=ON PLU=ON ("FISCHER TIM"/AU OR "FISCHER TIMO"/AU OR
                "FISCHER TIMOTHY"/AU OR "FISCHER TIMOTHY J"/AU)
                E BAGLIN T/AU
             40 SEA ABB=ON PLU=ON ("BAGLIN T"/AU OR "BAGLIN T B"/AU OR
L18
                "BAGLIN T P"/AU OR "BAGLIN TREVOR"/AU OR "BAGLIN TREVOR P"/AU)
                E TEJIDOR L/AU
              9 SEA ABB=ON PLU=ON ("TEJIDOR L"/AU OR "TEJIDOR LILIANA"/AU OR
L19
                "TEJIDOR LILIANA MARIA"/AU)
L20
           2517 SEA ABB=ON PLU=ON
                                    (AKZO (1A) NOBEL OR BIOMERIEUX)/CS, PA
           2528 SEA ABB=ON PLU=ON
L21
                                    (L11 OR L12 OR L13) (L)?POLYMER?
                E COAGULATION/CT
                E E3+ALL
L22
          32094 SEA ABB=ON PLU=ON COAGULATION+OLD, NT/CT
                E COAGULANTS/CT
                E E3+ALL
L23
           2733 SEA ABB=ON PLU=ON COAGULANTS+OLD/CT
                E BLOOD CLOT/CT
                E E3+ALL
                E E2
                E E3+ALL
T<sub>1</sub>24
           3390 SEA ABB=ON PLU=ON THROMBUS+OLD/CT
                E ANTICOAGULANTS/CT
                E E3+ALL
L25
          22524 SEA ABB=ON PLU=ON ANTICOAGULANTS+OLD, NT/CT
                E THROMBOSIS/CT
                E E3+ALL
L26
          11803 SEA ABB=ON PLU=ON
                                    THROMBOSIS+OLD, NT/CT
                E THROMBOLYTICS/CT
                E E3+ALL
L27
           2534 SEA ABB=ON PLU=ON THROMBOLYTICS/CT
                E THROMBOMOD/CT
                E E4+ALL
                E THROMBOPLASTIN/CT
                E E3+ALL
                E E2
                E E3+ALL
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L28
            820 SEA ABB=ON PLU=ON PROTHROMBINASE/CT
                E ANTI-THROMBOT/CT
                E ANTITHROMBOT/CT
                E E5+ALL
L29
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L30
                OR L26 OR L27)
L31
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L32
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L34
                (L) ?DETERMIN?
L35
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L36
              5 SEA ABB=ON PLU=ON L36 AND L29
L37
                D BIB TOT
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                E MATH/CT
                E E12+ALL
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L38
                OR GRAPH#
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1 SEA ABBEON PLUEON L33 AND L38
L39
L40
                E TURBID/CT
                E TURBIDITY/CT
                E E3+ALL
                E E10
                E E3+ALL
L41
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             1 SEA ABB=ON PLU=ON L33 AND L41
L42
             50 SEA ABB=ON PLU=ON L33 AND (L7 OR L8 OR L14 OR L14 OR L28)
T.43
L44
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L45
                L28)
L46
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L47
           4216 SEA ABB=ON PLU=ON L47 AND L29
L48
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L49
L50
             33 SEA ABB=ON PLU=ON L49 AND (L22 OR L23 OR L24 OR L26 OR L27)
              5 SEA ABB=ON PLU=ON L50 AND L26
L51
                E PROCOAG/CT
                E E6+ALL
                E BLOOD-COAGULATION FACTORS/CT
                E E3+ALL
L52
           1046 SEA ABB=ON PLU=ON (L22 OR BLOOD-COAGULATION FACTORS+NT/CT)
                (L) PROCOAG?
1.53
              2 SEA ABB=ON PLU=ON L50 AND L52
L54
             18 SEA ABB=ON PLU=ON L31 OR L46
L55
             14 SEA ABB=ON PLU=ON L37 OR L40 OR L42 OR L51 OR L53
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=> b hcap

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of this information, without the prior written consent of CAS, is strictly prohibited. FILE COVERS 1907 - 15 Jul 2005 VOL 143 ISS 4 FILE LAST UPDATED: 14 Jul 2005 (20050714/ED) New CAS Information Use Policies, enter HELP USAGETERMS for details. This file contains CAS Registry Numbers for easy and accurate substance identification. => d all fhitstr 154 tot L54 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN 2004:405393 HCAPLUS AN DN 142:2950 ED Entered STN: 19 May 2004 International multicenter international sensitivity index (ISI) TΤ calibration of a new human tissue factor thromboplastin reagent derived from cultured human cells ΑU Houdijk, W. P. M.; Van Den Besselaar, A. M. H. P. CS bioMerieux bv, Boxtel, Neth. Journal of Thrombosis and Haemostasis (2004), 2(2), 266-270 CODEN: JTHOA5; ISSN: 1538-7933 PB Blackwell Publishing Ltd. DTJournal English LΑ CC 9-15 (Biochemical Methods) Section cross-reference(s): 1 AB The international sensitivity index (ISI) of the first working standard of Simplastin HTF, a new human tissue factor thromboplastin derived from cultured human cells, has been assessed in a calibration exercise in two Canadian and five European labs. Calibrations against international reference prepns. (IRP) were performed for the manual method and six types of automated coagulometers that cover the majority of clotting endpoint principles in routine use. The ISI was method-dependent and varied between 1.03 and 1.29 when calibrated against rTF/95 (human IRP). The ISI was also dependent on the route of calibration. Compared with calibration against rTF/95, the ISIs obtained by calibration against RBT/90 (rabbit IRP) were on average 4.4% higher (P <0.005). Considering the principle of "like vs. like", the ISIs obtained by calibration against rTF/95 should be preferred. simplastin international sensitivity index calibration thromboplastin blood coagulation anticoagulant IT Anticoagulants Blood analysis Blood coagulation Calibration Human (international multicenter international sensitivity index (ISI) calibration of new human tissue factor thromboplastin reagent derived from cultured human cells) IT 446277-18-5, Simplastin HTF RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses) (international multicenter international sensitivity index (ISI) calibration of new human tissue factor thromboplastin reagent derived from cultured human cells) IT 9001-26-7, Prothrombin RL: BSU (Biological study, unclassified); BIOL (Biological study) (international multicenter international sensitivity index (ISI) calibration of new human tissue factor thromboplastin reagent derived from cultured human cells) RE.CNT THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD RE (1) Bader, R; Thromb Haemost 1994, V71, P292 HCAPLUS

(2) Fairweather, R; Arch Pathol Laboratory Med 1998, V122, P768 HCAPLUS

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Procedures 1999, P45
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(10) Tripodi, A; Thromb Haemost 1995, V74, P1368 HCAPLUS (11) Tripodi, A; Thromb Haemost 1998, V79, P439 HCAPLUS
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(17) WHO Expert Committee on Biological Standardization; WHO Techn Report
    Series 1999, V889, P64
L54 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     2003:697159 HCAPLUS
DN
     139:194022
ED
     Entered STN: 05 Sep 2003
     Method for diagnosing and monitoring hemostatic dysfunction, severe
ΤI
     infection and systematic inflammatory response syndrome
IN
     Toh, Cheng Hock; Tejidor, Liliana; Neisheim, Mike; Jones,
     Gregory
PA
     Biomerieux, Inc., USA
SO
     PCT Int. Appl., 62 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
IC
     ICM G01N033-53
     9-16 (Biochemical Methods)
     Section cross-reference(s): 7, 14
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                                              APPLICATION NO.
                                DATE
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CLASS
                  CLASS PATENT FAMILY CLASSIFICATION CODES
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                         ______
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WO 2003073099
                          G01N033-53
WO 2003073099 ECLA G01N033/92
US 2003228625 NCL 435/007.100; 436/071.000
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ECLA
                        G01N033/92
                 FTERM 2G045/CA26; 2G045/DA62; 2G045/FA40; 2G045/FB01;
 JP 2005519267
                        2G045/FB03; 2G045/FB06; 2G045/JA01; 4B063/QA01;
                        4B063/QA19; 4B063/QQ03; 4B063/QQ36; 4B063/QQ79;
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                        4B063/QS36; 4B063/QX01; 4B063/QX02; 4C084/AA02; 4C084/AA03; 4C084/BA44; 4C084/CA62; 4C084/MA65;
                        4C084/NA14; 4C084/ZA312; 4C084/ZA532; 4C084/ZA542;
                        4C084/ZA892; 4C084/ZB052; 4C084/ZB112; 4C084/ZB332;
                        4C084/ZB352; 4C084/ZB382; 4C084/ZC202
AB
     A method for diagnosing and monitoring subjects for hemostatic
     dysfunction, severe infection and systematic inflammatory response
     syndrome is provided whereby lipoproteins are examined for abnormalities,
     particularly for prothrombinase enhancement, through quant. and qual.
     diagnosing monitoring hemostatic dysfunction severe infection systematic
ST
     inflammatory syndrome
IT
     Lipoproteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
     (Biological study); USES (Uses)
        (Abnormal; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
TТ
     Apolipoproteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
     (Biological study); USES (Uses)
        (B; method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (C-reactive; method for diagnosing and monitoring hemostatic
        dysfunction, severe infection and systematic inflammatory response
        syndrome)
     Infection
IT
        (Severe; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
TT
     Annexins
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (V; method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
ΙŢ
     Blood coagulation
        (disorder; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
ΙT
     Blood coagulation
        (disseminated intravascular; method for diagnosing and monitoring
        hemostatic dysfunction, severe infection and systematic inflammatory
        response syndrome)
IT
     Lipoproteins
     RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (intermediate-d.; method for diagnosing and monitoring hemostatic
        dysfunction, severe infection and systematic inflammatory response
        syndrome)
IT
     Lipoproteins
     RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (low-d.; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
IT
     Binders
     Blood analysis
     Blood plasma
     Blood serum
     Chromatography
     Diagnosis
     Human
    NMR spectroscopy
     Samples
```

```
Sepsis
     Surface area
       Thrombus
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
TT
     Lipoproteins
     RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
IT
     Antibodies and Immunoglobulins
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
IT
     Inflammation
        (systemic inflammatory response syndrome; method for diagnosing and
        monitoring hemostatic dysfunction, severe infection and systematic
        inflammatory response syndrome)
IT
     Lipoproteins
     RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (very-low-d.; method for diagnosing and monitoring hemostatic
        dysfunction, severe infection and systematic inflammatory response
        syndrome)
IT
     Lipoproteins
     RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (β-; method for diagnosing and monitoring hemostatic dysfunction,
        severe infection and systematic inflammatory response syndrome)
TΤ
     9002-04-4, Thrombin
     RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
     use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
TT
     9035-58-9, Tissue factor (blood-coagulation)
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
IT
     9001-26-7, Prothrombin 72162-96-0, Prothrombinase
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
     (Biological study); USES (Uses)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
              THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Yu; US 20020150534 A1 2002 HCAPLUS
     9002-04-4, Thrombin
TT
     RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
     use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (method for diagnosing and monitoring hemostatic dysfunction, severe
        infection and systematic inflammatory response syndrome)
RN
     9002-04-4 HCAPLUS
    Thrombin (8CI, 9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
     2003:435205 HCAPLUS
AN
DN
     139:19321
ED
     Entered STN: 06 Jun 2003
TI
    Method for predicting an increased likelihood of antiphospholipid syndrome
     in a patient using phospholipids and waveform analysis
IN
     Ortel, Thomas L.; Su, Zuowei; Braun, Paul J.; Tejidor, Liliana
PA
     U.S. Pat. Appl. Publ., 47 pp.
     CODEN: USXXCO
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DT
     Patent
LA
     English
     ICM G01N033-53
IC
INCL 435007900
     9-5 (Biochemical Methods)
     Section cross-reference(s): 14, 15
FAN.CNT 1
                         KIND
     PATENT NO.
                                DATE
                                            APPLICATION NO.
                                                                    DATE
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PΤ
     US 2003104493
                          A1
                                20030605 US 2002-185186
                                                                     20020628
     WO 2003083490
                          A2
                                20031009
                                             WO 2002-US20618
                                                                     20020628
     WO 2003083490
                          A3
                                20040415
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
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     EP 1436628
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                                20040714
                                          EP 2002-806824
                                                                     20020628
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     JP 2005520170
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                                20050707
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PRAI US 2001-302261P
                          Ρ
                                 20010629
     US 2001-318755P
                          Р
                                20010911
     WO 2002-US20618
                          W
                                20020628
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
US 2003104493
                 ICM
                        G01N033-53
                 INCL
                        435007900
 US 2003104493
                 NCL
                        435/007.900
                        G01N021/77; G01N033/557; G01N033/68B; G01N033/68V;
                 ECLA
                        G01N033/86; G01N033/92; G06F019/00A
 WO 2003083490
                 ECLA
                        G01N021/77; G01N033/557; G01N033/68B; G01N033/68V;
                        G01N033/86; G01N033/92; G06F019/00A
 JP 2005520170
                 FTERM 4B063/QA01; 4B063/QA12; 4B063/QA19; 4B063/QQ03;
                        4B063/QQ43; 4B063/QQ44; 4B063/QR08; 4B063/QR42; 4B063/QR56; 4B063/QS25; 4B063/QS34; 4B063/QX02
     A method for predicting that an individual has antiphospholipid syndrome
AB
     or an increased likelihood of having antiphospholipid syndrome, includes:
     (a) providing a test sample from an individual; (b) combining the test
     sample with phospholipids; (c) directing a light beam at the test sample
     and monitoring light scattering or transmittance over time so as to
     provide a time-dependent measurement profile; (d) determining if a value or a
     slope at or over a particular time in the time-dependent measurement
     profile is beyond a corresponding predetd. value or slope threshold; and
     if the value or slope in the time-dependent measurement profile is beyond
     the predetd. threshold, then determining that the individual has
     antiphospholipid syndrome or an increased risk of antiphospholipid
     syndrome. The phospholipids can be provided as part of a coagulation
     reagent, or as part of a reagent where coagulation is not activated.
     Confirmatory assays for particular antibodies to phospholipid binding
     proteins can be performed.
st
     antiphospholipid syndrome diagnosis phospholipid waveform analysis;
     antibodies phospholipid light scattering time profile
IT
     Proteins
     RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
     use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (C-reactive; antiphospholipid syndrome diagnosis using phospholipids
        and waveform anal.)
IT
     Apolipoproteins
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
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DGN (Diagnostic use); PUR (Purification or recovery); ANST (Analytical
     study); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (H, antibodies to, immunoassay for; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
ΙT
     Antibodies and Immunoglobulins
     RL: AMX (Analytical matrix); ANST (Analytical study)
        (IgG; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
IT
     Samples
        (anal. of; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
IT
     Cardiolipins
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study);
     USES (Uses)
        (antibodies to, immunoassay for; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
TT
    Blood analysis
    Human
     Immunoassay
     Light scattering
    Liposomes
     Optical transmission
    Risk assessment
    Time
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
IT
    Antiphospholipid syndrome
    RL: ADV (Adverse effect, including toxicity); ANT (Analyte); BSU
     (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
    Antibodies and Immunoglobulins
    RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
IT
    Phosphatidylcholines, biological studies
    RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
IT
    Phosphatidylethanolamines, biological studies
    RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
IT
    Phosphatidylinositols
    RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
ΙT
    Phosphatidylserines
    RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
TТ
    Phospholipids, biological studies
    RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
IT
    Analysis
    Process automation
        (automated anal., for thrombosis and hemostasis testing;
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antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
TT
    Algorithm
        (automated; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
IT
     Analysis
        (clin., APTT assay; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     Lipoproteins
     RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
     use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (complexes, with C-reactive protein; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
ΙT
     Autoimmune disease
        (determining increased likelihood of having; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
IT
     Blood coagulation
        (disorder; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
IT
     Blood coagulation
        (disseminated intravascular, patient not having; antiphospholipid
        syndrome diagnosis using phospholipids and waveform anal.)
ΙT
     Metals, biological studies
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (divalent, reagent, phospholipids as part of; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
IT
     Immunoassav
        (enzyme-linked immunosorbent assay, confirmatory assay for
        antiphospholipid antibodies; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     Immunoassay
        (latex agglutination test, confirmatory assay for antiphospholipid
        antibodies; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
    Therapy
IT
        (monitoring; antiphospholipid syndrome diagnosis using phospholipids
        and waveform anal.)
     Simulation and Modeling, physicochemical
IT
        (neural network; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     Platelet (blood)
        (neutralization test; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
    Anticoagulants
        (oral; antiphospholipid syndrome diagnosis using phospholipids and
        waveform anal.)
IT
     Proteins
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study);
     USES (Uses)
        (phospholipid-binding, antibodies to; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
IT
        (phospholipids added in absence of; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
IT
     Coagulants
        (phospholipids as part of; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     Reagents
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (phospholipids as part of; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     Spectrometers
        (photooptical coagulation analyzers; antiphospholipid syndrome
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diagnosis using phospholipids and waveform anal.)
IT
     Thrombosis
        (predicting increased risk of; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
IT
     Daboia russelli
        (reagent containing liposomes and venom of; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
ΙT
    Halides
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (reagent, phospholipids as part of; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
TT
    Mammalia
        (reagents from tissue of; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
    Animal tissue
     Brain
     Placenta
        (reagents from; antiphospholipid syndrome diagnosis using phospholipids
        and waveform anal.)
IT
    Venoms
        (snake, reagent containing liposomes and Russel's viper; antiphospholipid
        syndrome diagnosis using phospholipids and waveform anal.)
IT
    Abortion
        (spontaneous; antiphospholipid syndrome diagnosis using phospholipids
        and waveform anal.)
TT
    Lupus erythematosus
        (systemic, determining increased likelihood of having; antiphospholipid
        syndrome diagnosis using phospholipids and waveform anal.)
TΤ
     Embolism
        (thromboembolism; antiphospholipid syndrome diagnosis using
        phospholipids and waveform anal.)
IT
     163663-01-2, Innovin 229637-90-5, Simplastin L
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (antiphospholipid syndrome diagnosis using phospholipids and waveform
        anal.)
TΤ
     107-73-3, Phosphorylcholine
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (in determination of C-reactive protein; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
TТ
     535969-18-7
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (reagent containing liposomes and; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
IT
     9035-58-9, Blood-coagulation factor
     III 72162-96-0, Thromboplastin
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (reagent, phospholipids as part of; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
TΤ
    9001-26-7, Prothrombin
    RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
    DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study);
    USES (Uses)
        (time reagent, phospholipids as part of; antiphospholipid syndrome
        diagnosis using phospholipids and waveform anal.)
IT
    537732-37-9
                  537732-38-0
                                 537732-39-1
                                               537732-40-4
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; method for predicting an increased
        likelihood of antiphospholipid syndrome in a patient using
       phospholipids and waveform anal.)
IT
     9035-58-9, Blood-coagulation factor
     III
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RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (reagent, phospholipids as part of; antiphospholipid syndrome diagnosis
        using phospholipids and waveform anal.)
RN
     9035-58-9 HCAPLUS
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
L54
AN
     2002:966970 HCAPLUS
DN
     138:21824
     Entered STN: 22 Dec 2002
ED
     Method for detecting a lipoprotein-acute phase protein complex and
TI
     predicting an increased risk of system failure or mortality
     Fischer, Timothy J.; Downey, Colin; Nesheim, Mike; Samis, John
IN
     A.; Tejidor, Liliana; Toh, Cheng Hock; Walker, John B.
PΑ
SO
     U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U.S. Ser. No. 591,642,
     abandoned.
     CODEN: USXXCO
DT
     Patent
LΑ
     English
     ICM G01N031-00
IC
INCL 702022000
     9-16 (Biochemical Methods)
     Section cross-reference(s): 14
FAN.CNT 6
     PATENT NO.
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     US 2002193949
                          A1
                                 20021219
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                                                                     20011219
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                                 19990622
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     US 6321164
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     EP 1522860
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                          A1
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     JP 2004503254
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     US 6898532
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                                              US 2003-377228
                                                                     20030228
     US 2004248308
                           Α1
                                 20041209
                                             US 2004-884293
                                                                      20040702
PRAI US 1995-477839
                           A1
                                 19950607
     US 1997-859773
                           A2
                                 19970521
     US 1997-1647
                           A2
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     US 1999-244340
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                                 19990204
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CLASS
PATENT NO.
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US 2002193949
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                 INCL
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US 2002193949
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                        702/022.000
                        G01N033/86; G01N033/92
                 ECLA
 US 6101449
                NCL
                        702/022.000; 702/028.000; 702/030.000; 702/032.000;
                        G06F019/00A2
                 ECLA
 US 6321164
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                        703/011.000
                 ECLA
                        G06F019/00A2
 US 2002019706
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                        702/032.000
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                        2G045/FB01; 2G045/GC10; 2G045/GC12; 2G045/JA01;
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                        4B063/QR48; 4B063/QS26; 4B063/QS31; 4B063/QX01
US 2001053959
                NCL
                        702/022.000
                        C07K016/18; G06F019/00A2
                 ECLA
 US 6898532
                NCL
                        702/022.000; 702/019.000; 702/030.000; 702/032.000;
                        703/011.000
                        436/069.000
                NCL
US 2004248308
    A method for diagnosing a condition of a patient involves the steps of (a)
     adding one or more reagents to a test sample from a patient, the test
     samples comprising at least part of a blood sample from the patient, in
     order to cause formation of a complex comprising at least one acute phase
     protein at least one human lipoprotein, while causing substantially no
     fiber polymerization; (b) measuring the formation of the complex over time so as
     to derive a time-dependent measurement profile, and (c) determining a slope
     and/or total change in the time-dependent measurement profile, so as to
     diagnose a condition of the patient. A greater formation of the complex
     is correlated to increased probability of death of the patient.
ST
     lipoprotein acute phase protein complex predicting risk system
IT
     Proteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); BIOL
     (Biological study); USES (Uses)
        (C-reactive; lipoprotein-acute phase protein complex detection and
        predicting an increased risk of system failure or mortality)
TT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (SAA (serum amyloid A); lipoprotein-acute phase protein complex
        detection and predicting an increased risk of system failure or
        mortality)
IT
    Lipoproteins
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (high-d.; lipoprotein-acute phase protein complex detection and
        predicting an increased risk of system failure or mortality)
IT
     Lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (intermediate-d.; lipoprotein-acute phase protein complex detection and
        predicting an increased risk of system failure or mortality)
IT
    Blood analysis
       Blood coagulation
     Chylomicrons
     Complexation
    Diagnosis
    Human
    Optical transmission
        (lipoprotein-acute phase protein complex detection and predicting an
        increased risk of system failure or mortality)
IT
    Apolipoproteins
     Fibrins
     Lipoproteins
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RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (lipoprotein-acute phase protein complex detection and predicting an
        increased risk of system failure or mortality)
IT
     Lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (low-d.; lipoprotein-acute phase protein complex detection and
        predicting an increased risk of system failure or mortality)
     Lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (very-low-d.; lipoprotein-acute phase protein complex detection and
     predicting an increased risk of system failure or mortality) 60-00-4, EDTA, biological studies 68-04-2, Sodium citrate 7
IT
     Iron, biological studies 7439-95-4, Magnesium, biological studies
     7439-96-5, Manganese, biological studies 7440-39-3, Barium, biological
              7440-70-2, Calcium, biological studies 8001-27-2, Hirudin
     9000-94-6, Antithrombin 9005-49-6, Heparin, biological studies
     71142-71-7, PPack 72162-96-0, Thromboplastin
     93050-91-0, I2581
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (lipoprotein-acute phase protein complex detection and predicting an
        increased risk of system failure or mortality)
IT
     72162-96-0, Thromboplastin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (lipoprotein-acute phase protein complex detection and predicting an
        increased risk of system failure or mortality)
RN
     72162-96-0 HCAPLUS
CN
     Prothrombinase (9CI)
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     2002:928029 HCAPLUS
DN
     138:16613
ED
     Entered STN: 06 Dec 2002
     Use of liposomes of defined composition and size for the preparation of
TI
     prothrombin time reagents
     Wang, Jianfang; Johnson, Kevin Bruce; Tejidor, Liliana Maria;
IN
     Doobay, Hema
PA
     USA
so
     U.S. Pat. Appl. Publ., 6 pp.
     CODEN: USXXCO
DT
     Patent
LΑ
     English
     ICM A01N037-18
IC
     ICS A61K038-00; A61K039-385; A61K009-127; A61K038-16; A61K035-14;
          C07K017-00; C07K016-00; C07K014-00; C07K001-00
INCL 424195110; 424450000; 514002000; 514012000; 530380000
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 9, 14
FAN. CNT 1
     PATENT NO.
                        KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
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                                            ------
                                                                   ------
     US 2002182225
                        A1
                                20021205
                                            US 2001-815398
                                                                   20010322
     US 6596543
                         B2
                                20030722
PRAI US 2001-815398
                                20010322
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                        ______
 US 2002182225
                 TCM
                        A01N037-18
                 ICS
                        A61K038-00; A61K039-385; A61K009-127; A61K038-16;
                        A61K035-14; C07K017-00; C07K016-00; C07K014-00;
                        C07K001-00
                 INCL
                        424195110; 424450000; 514002000; 514012000; 530380000
 US 2002182225
                        436/069.000; 424/001.210; 424/009.100; 424/009.321;
                 NCL
                        424/009.322; 424/450.000; 424/460.000; 530/381.000
                 ECLA
                        A61K009/127
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AB
     The present invention relates generally to the field of prothrombin time
     reagents for determining dysfunction in the coagulation system and more
     specifically to reagents made from native thromboplastin or
     purified or recombinant tissue factor and
     phospholipids from a natural or synthetic source. The present invention
     relates to methods to make a diagnostic reagent that includes a
     membrane-bound protein incorporated into a liposome and having addnl.
     empty liposomes (liposomes without membrane-bound protein incorporated
     therein) added to the solution
ST
     prothrombin time reagent prepn liposome
IT
     Diagnosis
        (agents; use of liposomes of defined composition and size for the preparation of
        prothrombin time reagents)
IT
     Liposomes
        (use of liposomes of defined composition and size for the preparation of
        prothrombin time reagents)
IT
     Phospholipids, biological studies
     RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
        (use of liposomes of defined composition and size for the preparation of
        prothrombin time reagents)
IT
     9001-26-7, Prothrombin
     RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
        (time reagents; use of liposomes of defined composition and size for the
        preparation of prothrombin time reagents)
IT
     9035-58-9, Blood-coagulation factor
     III 72162-96-0, Thromboplastin
     RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
        (use of liposomes of defined composition and size for the preparation of
        prothrombin time reagents)
IT
     9035-58-9, Blood-coagulation factor
     III
     RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
        (use of liposomes of defined composition and size for the preparation of
        prothrombin time reagents)
RN
     9035-58-9 HCAPLUS
    Blood-coagulation factor III (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
L54
     2000:553781 HCAPLUS
AN
DN
     133:132103
ED
     Entered STN: 11 Aug 2000
TI
    A method and apparatus for predicting the presence of hemostatic
     dysfunction in a patient sample
IN
     Toh, Cheng Hock; Downey, Colin; Fischer, Timothy J.
     Akzo Nobel N.V., Neth.
PA
     PCT Int. Appl., 111 pp.
SO
     CODEN: PIXXD2
DТ
    Patent
LΑ
     English
     ICM G01N033-86
IC
     9-1 (Biochemical Methods)
CC
     Section cross-reference(s): 14
FAN.CNT 6
    PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
PΤ
    WO 2000046603
                         A1
                                20000810
                                            WO 2000-US2987
                                                                   20000204
        W: AU, CA, JP, KR, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
    CA 2362055
                          AA
                                20000810
                                            CA 2000-2362055
                                                                    20000204
    EP 1147423
                          A1
                                20011024
                                            EP 2000-913371
                                                                    20000204
    EP 1147423
                          B1
                                20041110
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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IE, FI

T2

20021203

20000204

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JP 2002541431
                                           JP 2000-597634
     AU 774889
                               20040708
                                           AU 2000-34833
                         B2
                                                                  20000204
     AU 2000034833
                         A5
                               20000825
     AT 282208
                         E
                               20041115
                                           AT 2000-913371
                                                                  20000204
     EP 1522860
                         A1
                               20050413
                                          EP 2004-25887
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI, CY
     ES 2231167
                         T3
                               20050516
                                           ES 2000-913371
                                                                  20000204
     US 2004248308
                        A1
                               20041209
                                           US 2004-884293
                                                                  20040702
PRAI US 1999-244340
                               19990204
                         Α
     EP 2000-913371
                         А3
                               20000204
     WO 2000-US2987
                         W
                               20000204
     US 2003-377228
                         A1
                               20030228
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
                ----
               ICM
 WO 2000046603
                       G01N033-86
 US 2004248308 NCL
                       436/069.000
    A method is disclosed for predicting the presence of hemostatic
     dysfunction. At least one time-dependent measurement on an unknown sample
     is performed and a resp. property of the sample is measured over time so
     as to derive a time-dependent measurement profile. One or more predictor
     variables, including initial slope, are defined which sufficiently define
     the data of the time-dependent measurement profile. A model is then
     derived that represents the relationship between an abnormality and a set
     of predictor variables. Subsequently, the model is utilized to predict
     hemostatic dysfunction.
st
     app hemostatic dysfunction
IT
     Fibrinogen degradation products
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (DD; a method and apparatus for predicting presence of hemostatic
        dysfunction in a patient sample)
IT
    Acidosis
    Apparatus
    Blood analysis
      Blood coagulation
    Blood plasma
    Diagnosis
    Disease, animal
    Hypoxia, animal
     Infection
    Liver, disease
    Neoplasm
    Parturition
     Platelet (blood)
    Pregnancy
    Spectroscopy
    Surgery
    Therapy
       Thrombus
    Transplant rejection
        (a method and apparatus for predicting presence of hemostatic dysfunction in
        a patient sample)
TТ
    Fibrinogens
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (a method and apparatus for predicting presence of hemostatic dysfunction in
       a patient sample)
ΙT
    Artery
        (aorta, aneurysm rupture; a method and apparatus for predicting presence of
       hemostatic dysfunction in a patient sample)
ΙT
    Blood coagulation
        (disseminated intravascular; a method and apparatus for predicting presence
       of hemostatic dysfunction in a patient sample)
IT
    Hemostatics
        (dysfunction; a method and apparatus for predicting presence of hemostatic
       dysfunction in a patient sample)
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TT
     Inflammation
        (systemic inflammatory response syndrome; a method and apparatus for
       predicting presence of hemostatic dysfunction in a patient sample)
IT
     Injury
        (trauma; a method and apparatus for predicting presence of hemostatic
        dysfunction in a patient sample)
IT
     9001-26-7, Prothrombin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (a method and apparatus for predicting presence of hemostatic dysfunction in
        a patient)
TT
     72162-96-0, Thromboplastin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (a method and apparatus for predicting presence of hemostatic dysfunction in
        a patient sample)
IT
     7439-93-2, Lithium, biological studies
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (overdose; a method and apparatus for predicting presence of hemostatic
        dysfunction in a patient sample)
RE CNT 4
           THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Astion; Arch Pathol Lab Med 1992, V116, P995 MEDLINE
(2) Givens; US 5708591 A 1998
(3) Hoffman; Organon Teknika 1990, P3 MEDLINE
(4) Pohl; Haemostasis 1994, V24, P325 MEDLINE
     72162-96-0, Thromboplastin
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (a method and apparatus for predicting presence of hemostatic dysfunction in
        a patient sample)
RN
     72162-96-0 HCAPLUS
     Prothrombinase (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
     2000:368697 HCAPLUS
AN
DN
     132:345127
ED
    Entered STN: 04 Jun 2000
    Devices and methods for performing blood coagulation assays by
TI
     piezoelectric sensing
    Wu, Jogin R.; Moreno, Mario
IN
     Akzo Nobel N.V., Neth.
PA
     PCT Int. Appl., 40 pp.
so
     CODEN: PIXXD2
DТ
    Patent
LА
    English
IC
     ICM G01N033-00
     9-1 (Biochemical Methods)
CC
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
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                                           -----
                                                                  -----
    WO 2000031529
                         A1
                               20000602
                                           WO 1999-US27287
                                                                  19991117
     WO 2000031529
                         C2
                               20021107
        W: AU, CA, JP, KR, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
     US 6200532
                               20010313
                                           US 1998-197481
                         B1
                                                                  19981120
                               20011010
                                           EP 1999-960444
     EP 1141699
                         A1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
PRAI US 1998-197481
                         A1
                               19981120
    WO 1999-US27287
                               19991117
                         W
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
                ICM
WO 2000031529
                       G01N033-00
                ECLA G01N027/00B1B; G01N033/49B
WO 2000031529
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US 6200532
                 NCL
                        422/073.000; 073/064.410; 073/064.420; 073/064.430;
                        436/069.000
                 ECLA
                        G01N027/00B1B; G01N033/49B
AB
     A device and method for performing blood coagulation assays, particularly
     prothrombin times and activated partial thromboplastin times and
     other clotting parameters are disclosed. The device comprises a
     disposable strip (figures 1, 2 and 4) (containing a sample inlet (8) for
     sample delivery, a capillary channel for driving force, and a reaction
     chamber (1) with an appropriate dry reagent for a specific assay) and a
     piezoelec. sensor (3). The device could also include a heating element
     for temperature control, and a magnetic bender (2). The magnetic bender is
     driven by an electromagnetic field generator (6) and is attached onto a
     piezoelec. film (3) in contact with the blood sample. An elec. signal
     generated at the piezo film is characterized by its frequency and
     amplitude due to the movement of the attached metal film. The signal
     collected at the site of the film represents the process of a biochem.
     reaction in the reaction chamber, while the blood sample proceeds to the
     point at which clot formation starts.
ST
     blood coagulation assay piezoelec sensor
TT
     Membranes, nonbiological
        (asym.; devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
TT
     Blood analysis
       Blood coagulation
     Capillary tubes
     Energy transfer
     Filters
     Heaters
     IR sources
     Interferometry
     Mirrors
     Piezoelectric sensors
        (devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
IT
     Reagents
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
     Fluoropolymers, uses
     RL: DEV (Device component use); USES (Uses)
        (devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
ΙT
     Lenses
        (focusing; devices and methods for performing blood coagulation assays
        by piezoelec. sensing)
IT
     Polymers, uses
     RL: DEV (Device component use); USES (Uses)
        (polysulfonates, asym. membrane of; devices and methods for performing
        blood coagulation assays by piezoelec. sensing)
IT
     9002-05-5, Thromboplastin
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (activated partial thromboplastin time; devices and methods
        for performing blood coagulation assays by piezoelec. sensing)
IT
     12047-27-7, Barium Titanium oxide, uses 12626-81-2, Lead-zirconate-
              24937-79-9, Polyvinylidene fluoride
     titanate
                                                     37349-19-2.
     Lead-magnesium-niobate
     RL: DEV (Device component use); USES (Uses)
        (devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
IT
     9001-26-7, Prothrombin
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (time; devices and methods for performing blood coagulation assays by
        piezoelec. sensing)
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RE.CNT 3
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Meller; US 5892144 A 1999 HCAPLUS
(2) Siegal; US 4450375 A 1984
(3) Siegal; US 4629926 A 1986
L54 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
    1999:464135 HCAPLUS
DN
    131:85163
ED
    Entered STN: 29 Jul 1999
    A method for predicting an abnormal level of clotting proteins using
    neural network simulation
TN
    Braun, Paul; Givens, Thomas B.; Fischer, Timothy J.
PΑ
    Akzo Nobel N.V., Neth.
SO
    PCT Int. Appl., 94 pp.
    CODEN: PIXXD2
DT
    Patent
LΑ
    English
    G01N033-49; G01N033-86; G06F019-00
IC
    9-16 (Biochemical Methods)
    Section cross-reference(s): 7, 14
FAN.CNT 6
    PATENT NO.
                       KIND
                              DATE
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                                                                DATE
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                                                                _ _ _ _ _ _ _
    WO 9934208
PΙ
                              19990708
                        A1
                                          WO 1998-US27865
                                                                19981230
        W: AU, CA, JP, KR, US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
                        T2
                                                                19960605
    JP 11507131
                              19990622
                                          JP 1996-501365
    JP 3534415
                        B2
                              20040607
                                          JP 1997-501365
                                                                19960605
    US 6321164
                                         US 1997-1647
                       B1
                              20011120
                                                                19971231
    CA 2316361
                                         CA 1998-2316361
                        AA
                              19990708
                                                                19981230
    AU 9919503
                        A1
                              19990719
                                          AU 1999-19503
                                                                19981230
                        A1
    EP 1042669
                              20001011
                                         EP 1998-964342
                                                                19981230
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
    JP 2002500360
                        T2
                              20020108
                                          JP 2000-526808
                                                                19981230
    US 2001053959
                              20011220
                                          US 2001-918214
                                                                20010730
                       A1
PRAI US 1995-477839
                       Α
                              19950607
    US 1997-1647
                        A2
                              19971231
    WO 1996-US8905
                        W
                              19960605
    US 1997-859773
                        A2
                              19970521
    WO 1998-US27865
                       W
                              19981230
    US 2000-517496
                        A1
                              20000302
CLASS
PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
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                      WO 9934208
                IC
                      G01N033-49IC
                                       G01N033-86IC
                                                      G06F019-00
WO 9934208
                ECLA
                      G01N033/49B
US 6321164
                      702/022.000; 702/028.000; 702/030.000; 702/032.000;
                NCL
                      703/011.000
                ECLA
                      G06F019/00A2
                      702/022.000
US 2001053959
                NCL
                ECLA
                      C07K016/18; G06F019/00A2
AB
    A method is disclosed for predicting the presence of an abnormal level of
    one or more proteins in the clotting cascade from at least one
    time-dependent measurement profile. At least one time-dependent
    measurement on an unknown sample is performed and a resp. property of the
    sample is measured over time so as to derive a time-dependent measurement
    profile. A set of a plurality of predictor variables are defined which
    sufficiently define the data of the time-dependent measurement profile. A
    model is then derived that represents the relationship between the
    abnormality and the set of predictor variables. Subsequently, the model
    is utilized to predict which protein or proteins in the clotting cascade
    are at an abnormal level, with the prediction being a better prediction
    than clot time alone. Neural networks using self-organizing feature maps
```

and learning vector quantization were used to analyze optical data from clin. coagulation tests. Self-organizing feature maps using an unsupervised learning algorithm were trained with data from normal donors, patients with abnormal levels of coagulation proteins and patients undergoing anticoagulant therapy. Specimen categories were distinguishable in these maps with varying levels of resolution. A supervised neural network method, learning vector quantization, was used to train maps to classify coagulation data. These networks showed sensitivity greater than 0.6 and specificity greater than 0.85 for detection of several factor deficiencies and heparin.

- ST clotting protein abnormality prediction neural network simulation; blood coagulation factor abnormality prediction
- IT Proteins, specific or class

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(clotting; predicting abnormal level of clotting proteins using neural network simulation)

IT Blood

(disease, congenital or acquired; predicting abnormal level of clotting proteins using neural network simulation)

IT Blood coagulation

(extrinsic; predicting abnormal level of clotting proteins using neural network simulation)

IT Blood coagulation

(intrinsic; predicting abnormal level of clotting proteins using neural network simulation)

IT Simulation and Modeling, biological

(neural network; predicting abnormal level of clotting proteins using neural network simulation)

IT Anticoagulants

(oral, in known blood samples; predicting abnormal level of clotting proteins using neural network simulation)

IT Blood analysis

Blood coagulation

Simulation and Modeling, biological

Therapy

Thrombosis

(predicting abnormal level of clotting proteins using neural network simulation)

- IT Fibrinogens
 - RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(reagents; predicting abnormal level of clotting proteins using neural network simulation)

- IT 72162-96-0, Thromboplastin
 - RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(APTT reagents; predicting abnormal level of clotting proteins using neural network simulation)

- IT 9002-04-4, Thrombin
 - RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(TT reagents; predicting abnormal level of clotting proteins using neural network simulation)

- IT 9005-49-6, Heparin, analysis
 - RL: ANT (Analyte); ARU (Analytical role, unclassified); ANST (Analytical study)
 - (in known blood samples; predicting abnormal level of clotting proteins using neural network simulation)
- IT 9001-24-5, Blood coagulation factor V 9001-25-6, Blood coagulation
 factor VII 9001-26-7, Blood coagulation factor II
 9001-27-8, Blood coagulation factor VIII 9001-28-9, Blood coagulation
 factor IX 9001-29-0, Blood coagulation factor X 9001-30-3, Blood
 coagulation factor XII 9013-55-2, Blood coagulation factor XI
 RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)

```
(predicting abnormal level of clotting proteins using neural network
        simulation)
IT
     229637-90-5, Simplastin L 229638-70-4, Platelin L
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (predicting abnormal level of clotting proteins using neural network
        simulation)
RE.CNT
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Fischer; 1997
(2) Givens; 1998
(3) Grossman; 1992
    72162-96-0, Thromboplastin
TT
    RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (APTT reagents; predicting abnormal level of clotting proteins using
       neural network simulation)
RN
     72162-96-0 HCAPLUS
CN
    Prothrombinase (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
    1999:354324 HCAPLUS
AN
DN
    130:349368
    Entered STN: 09 Jun 1999
ED
ТT
    Blood coagulation monitoring device with liquid crystal and gradient
IN
    Moreno, Mario; Wu, Jogin R.
PA
    Akzo Nobel N.V., Neth.
    U.S., 17 pp.
SO
    CODEN: USXXAM
DТ
    Patent
LΑ
    English
    ICM G01N033-86
IC
INCL 436069000
CC
    9-1 (Biochemical Methods)
FAN.CNT 1
    PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                                                                  DATE
    US 5908786
PΙ
                         Α
                               19990601
                                           US 1997-989561
                                                                  19971212
    WO 9930166
                        A1
                               19990617
                                          WO 1998-US26453
                                                                 19981211
        W: AU, CA, JP, KR, US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
    AU 9918211
                         A1
                               19990628
                                           AU 1999-18211
                                                                  19981211
PRAI US 1997-989561
                         A1
                               19971212
    WO 1998-US26453
                         W
                               19981211
CLASS
PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
                       ••----
US 5908786
                ICM
                       G01N033-86
                       436069000
                INCL
                       436/069.000; 073/064.410; 073/064.430; 422/055.000;
US 5908786
                NCL
                       422/058.000; 422/073.000; 422/101.000; 422/102.000;
                       436/164.000; 436/165.000; 436/177.000; 436/178.000
                ECLA
                       G01N033/86
WO 9930166
                ECLA
                       G01N033/86
    A device and method are disclosed for determining whether or not an individual's
    blood coaqulation time is in a normal or abnormal range, and is
    particularly suitable for measuring prothrombin time and activated partial
    thromboplastin time coagulation values. The device includes a
    housing with an area for receiving a sample, a capillary channel or
    elongated area with an absorbent material, and a gradient heater. Liquid
    crystal and a coagulation agent can be disposed within the device to mix
    with a sample added to the device. The mixture passes along the capillary
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IT

IT

TΤ

TT

TТ

ΙT

IT

RE

RN

CN

1998:745086 HCAPLUS

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channel or absorbent material and stops moving when the sample has
     clotted. Due to the gradient heater and liquid crystal, the mixture may or
     may not change color, depending upon whether the individual has an
     abnormally short, normal, or abnormally long clot time.
     blood coagulation time analyzer liq crystal; gradient heater blood
     coagulation time analyzer
     Phospholipids, biological studies
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (blood clotting reagent; blood coagulation monitoring device with liquid
        crystal and gradient heater)
     Analytical apparatus
     Blood analysis
       Blood coagulation
     Liquid crystals
     Membrane filters
        (blood coagulation monitoring device with liquid crystal and gradient
        heater)
     Reagents
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (blood coagulation monitoring device with liquid crystal and gradient
        heater)
     Capillary tubes
        (channels; blood coagulation monitoring device with liquid crystal and
        gradient heater)
     Electric heaters
        (gradient heaters; blood coagulation monitoring device with liquid
        crystal and gradient heater)
     Heaters
        (gradient; blood coagulation monitoring device with liquid crystal and
        gradient heater)
     72162-96-0, Thromboplastin
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (blood clotting reagent; blood coagulation monitoring device with liquid
        crystal and gradient heater)
RE.CNT
              THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Burgess, D; IEEE/IRPS 1984
(2) Cusak; US 5302348 1994
(3) Cusak; US 5372946 1994
(4) Davis; US 5058999 1991
(5) Dribbon; US 5678566 1997
(6) Fleuren, E; IEEE/IRPS 1983
(7) Gavin; US 5534226 1996 HCAPLUS
(8) Hillman; US 4963498 1990 HCAPLUS
(9) Hillman; US 5140161 1992 HCAPLUS
(10) Hillman; US 5144139 1992 HCAPLUS
(11) Hillman; US 5164598 1992 HCAPLUS
(12) Hillman; US 5204525 1993 HCAPLUS
(13) Hillman; US 5300779 1994 HCAPLUS
(14) Oberhardt; US 4849340 1989 HCAPLUS
(15) Phillips; US 5135549 1992 HCAPLUS
     72162-96-0, Thromboplastin
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (blood clotting reagent; blood coagulation monitoring device with liquid
        crystal and gradient heater)
     72162-96-0 HCAPLUS
     Prothrombinase (9CI)
                           (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
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DN
     Entered STN: 24 Nov 1998
ED
     Preparation of backbone-cyclized peptide derivatives as serine protease
TI
     and thrombin inhibitors
IN
     Adang, Anton Egbert Peter
     Akzo Nobel N.V., Neth.
PΑ
     PCT Int. Appl., 52 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
IC
     ICM C07K005-00
     ICS C07K005-08; A61K038-05
     34-3 (Amino Acids, Peptides, and Proteins)
     Section cross-reference(s): 1, 7
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
     ---------
                         ----
                                -----
                                             -----
                        A1 19981112 WO 1998-EP2587 19980428
PΤ
     WO 9850420
         W: AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, ID, IS, JP, KG, KP,
             KR, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI,
             SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     CA 2287569
                         AA 19981112 CA 1998-2287569
                                                                    19980428
     AU 9876520
                          A1
                                19981127
                                           AU 1998-76520
                                                                   19980428
     AU 729910
                          R2
                                20010215
     EP 979240
                          A1
                                20000216
                                           EP 1998-924265
                                                                    19980428
     EP 979240
                          B1
                                20040414
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     BR 9809342
                                20000704 BR 1998-9342
                                                                   19980428
                                20000721 TR 1999-9902692
20001027 NZ 1998-500620
20011127 JP 1998-547715
     TR 9902692
                         T2
                                                                   19980428
     NZ 500620
                          Α
                                                                    19980428
                         T2
     JP 2001524117
                                                                    19980428
                        C2 20020620 RU 1999-125967
     RU 2183642
                                                                    19980428
                        T 20040831 PT 1998-924265
T3 20041116 ES 1998-924265
A 19981104 ZA 1998-3629
B1 20030318
     AT 264339
                                                                   19980428
     PT 979240
                                                                   19980428
     ES 2218827
                                                                   19980428
     ZA 9803629
                                                                    19980429
                                                                   19991026
     US 6534495
     NO 9905316
                         Α
                               19991101
                                           NO 1999-5316
                                                                   19991101
                              20000731
    MX 9910057
                         Α
                                           MX 1999-10057
                                                                   19991101
PRAI EP 1997-201286
                         Α
                               19970502
     WO 1998-EP2587
                          W
                                19980428
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
 ------
                ----
WO 9850420
                 ICM
                        C07K005-00
                 ICS
                        C07K005-08; A61K038-05
                 ECLA
 WO 9850420
                        C07K005/02A
 US 6534495
                 NCL
                        514/212.030; 514/212.080; 514/309.000; 514/349.000;
                        514/550.000; 540/524.000; 540/527.000; 546/141.000;
                        546/297.000; 560/013.000; 560/150.000
                 ECT.A
                       C07K005/02A
os
    MARPAT 130:4091
GI
```

$$Q = \bigvee_{H} \bigvee_{O} \bigvee_{N} \bigvee_{O} \bigvee_{N} \bigvee_{N} \bigvee_{O} \bigvee_{N} \bigvee_{N}$$

AΒ The invention relates peptide derivs. R1SO2-B-X-Z-CO-Y [B = bond, amino acid NHCH[(CH2)pCO2H]CO or ester derivative thereof, Gly, D-1perhydroiosquinolinecarboxylic acid (D-1-Piq), D-3-Piq, D-1,2,3,4-tetrahydroisoquinoline-1-carboxylic acid (D-1-Tiq), D-3-Tiq, D-aminotetralincarboxylic acid, aminoindanecarboxylic acid, L- or D-amino acid containing hydrophobic, basic, or neutral side chain; X = amino acid containing hydrophobic side chain, Gln, Ser, Thr, 2-aminoisobutyric acid, NR2CH2CO, Q, Q1, cyclic amino acid optionally containing addnl. heteroatom N, O or S, (un) substituted with C1-6 alkyl, C1-6 alkoxy, PhCH2O, oxo; Z = Lys, 4-aminocyclohexylglycine; Y = (un) substituted NHC1-6 alkylene-Ph, OR4, NR5R6; W = CH, N; R1 = R2O2C(CHR2)m, R2NH(CHR2)m, (un)substituted C1-12 alkyl, C2-12 alkenyl, C6-14 aryl, C7-15 aralkyl, C8-16 aralkenyl; each R2 = independently H, C1-12 alkyl, C3-8 cycloalkyl, (un)substituted C6-14 aryl or C7-15 aralkyl; R3 = H, C1-6alkyl, Ph optionally substituted with OH, C1-6 alkoxy, CO2H, CO2-C1-6 alkyl, CONH2, halo; R4 = H, C2-6 alkyl, CH2Ph; R5, R6 = independently H, C1-6 alkoxy, (un)substituted C1-6 alkyl; R5R6 = CH2CH2VCH2CH2; V = 0, S, SO2; m = 1-3; n = 2-4; p = 1-3].The compds. of the invention have anticoagulant activity and can be used in treating or preventing thrombin-related diseases. Thus, coupling of homologated Lys derivative I (prepared in 6 steps from Cbz-Lys(Boc)-OH, NaCN, and benzylamine) with backbone-cyclized dipeptide derivative II (prepared in 4 steps from L-α-amino-ε-caprolactam, Me bromoacetate, and benzylsulfonyl chloride), followed by oxidation and deprotection gave desired title compound III. III inhibited factor Xa with IC50 = $0.64 \mu M$.

ST backbone cyclized peptide deriv prepn thrombin inhibitor; antithrombotic backbone cyclized peptide deriv prepn; anticoagulant backbone cyclized peptide deriv prepn; serine protease inhibitor backbone cyclized peptide deriv prepn

IT Anticoagulants

Anticoagulants

(Preparation of backbone-cyclized peptide derivs. as serine protease and thrombin inhibitors)

IT Peptides, preparation

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cyclic; Preparation of backbone-cyclized peptide derivs. as serine protease

```
and thrombin inhibitors)
                          9002-05-5, Factor Xa
IT
     9002-04-4, Thrombin
                                                  65312-43-8,
     Factor VIIa
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Preparation of backbone-cyclized peptide derivs. as serine protease and
        thrombin inhibitors)
     37259-58-8, Serine protease
     RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
     (Biological study)
        (Preparation of backbone-cyclized peptide derivs. as serine protease and
        thrombin inhibitors)
ΤT
     9035-58-9, Blood-coagulation factor
     III
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (human; Preparation of backbone-cyclized peptide derivs. as serine protease
        and thrombin inhibitors)
TT
     215790-96-8P
                  215790-97-9P
                                   215790-98-0P
                                                  215790-99-1P
                                                                 215791-00-7P
     215791-01-8P
                    215791-03-0P
                                   215791-04-1P
                                                  215791-05-2P
                                                                 215791-06-3P
     215791-07-4P
                    215791-08-5P
                                   215791-09-6P
                                                  215791-10-9P
                                                                  215791-11-0P
                                   215791-15-4P
     215791-12-1P
                    215791-13-2P
                                                  215791-16-5P
                                                                 215791-17-6P
     215791-18-7P
                    215791-19-8P
                                   215791-21-2P
                                                  215791-24-5P
                                                                  215791-25-6P
     215791-26-7P
                    215791-28-9P
                                   215791-29-0P
                                                  215791-30-3P
                                                                  215791-31-4P
     215791-32-5P
                    215791-34-7P
                                   215791-35-8P
                                                                  215791-37-0P
                                                  215791-36-9P
     215791-38-1P
                    215791-40-5P
                                   215791-41-6P
                                                  215791-42-7P
                                                                 215791-44-9P
     215791-46-1P
                    215791-47-2P
                                   215791-49-4P
                                                  215791-50-7P
                                                                  215791-52-9P
     215791-54-1P
                    215791-56-3P
                                   215791-57-4P
                                                  215791-58-5P
                                                                  215791-60-9P
     215791-61-0P
                    215791-62-1P
                                   215791-63-2P
                                                  215791-65-4P
                                                                  215791-67-6P
     215791-68-7P
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                                                  215791-74-5P
                                                                  215791-75-6P
     215791-76-7P
                   215791-77-8P
                                   215791-78-9P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of backbone-cyclized peptide derivs. as serine protease
        inhibitors)
ΙT
     96-32-2, Methyl bromoacetate 98-09-9, Benzenesulfonyl chloride
     110-91-8, Morpholine, reactions 123-75-1, Pyrrolidine, reactions
     123-90-0, Thiomorpholine 594-44-5, Ethanesulfonyl chloride
                                                                    1939-99-7.
     Benzylsulfonyl chloride 2386-60-9, Butanesulfonyl chloride Z-Lys(Boc)-OH 7517-19-3, Leucine methyl ester hydrochloride
     10147-36-1, Propanesulfonyl chloride 10147-37-2, Isopropylsulfonyl
               21568-87-6, L-α-Amino-ε-caprolactam 39262-22-1,
     (-)-10-Camphorsulfonyl chloride
                                      51077-14-6, N-tert-Butoxycarbonyl-L-
     azetidine-2-carboxylic acid 92455-59-9
                                               179523-53-6 179523-60-5
     186885-74-5 195722-71-5 201354-26-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of backbone-cyclized peptide derivs. as serine protease
        inhibitors)
TТ
     2389-49-3P
                 76944-95-1P 82611-52-7P 95582-17-5P
                                                           172348-42-4P
     172348-46-8P
                   174960-80-6P
                                   174960-81-7P
                                                  174960-90-8P
                                                                 190905-65-8P
     190905-68-1P
                    194985-26-7P
                                   194985-27-8P
                                                  194985-37-0P
                                                                  204267-17-4P
                  215791-80-3P
     214153-20-5P
                                   215791-81-4P
                                                  215791-82-5P
                                                                  215791-83-6P
     215791-85-8P 215791-86-9P
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     215791-99-4P
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                                                  215792-02-2P
                                                                 215792-03-3P
     215792-04-4P
                    215792-05-5P
                                   215792-06-6P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of backbone-cyclized peptide derivs. as serine protease
        inhibitors)
RE.CNT
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Cor Therapeutics Inc; WO 9640743 A 1996 HCAPLUS
(2) Jones, D; JOURNAL OF ENZYME INHIBITION 1995, V9, P43 HCAPLUS
    9002-04-4, Thrombin
```

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Preparation of backbone-cyclized peptide derivs. as serine protease and
       thrombin inhibitors)
     9002-04-4 HCAPLUS
RN
    Thrombin (8CI, 9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
    1998:682605 HCAPLUS
DN
     129:299887
    Entered STN: 28 Oct 1998
ED
ТT
    Method and apparatus for optimizing assay sequencing on a random access
     clinical laboratory instrument so as to reduce reagent cross-contamination
IN
    Givens, Thomas B.; Hunley, Charles W.; Fischer, Timothy J.;
     Bowling, Regina J.
PΑ
    Akzo Nobel N.V., Neth.
SO
    PCT Int. Appl., 27 pp.
    CODEN: PIXXD2
DT
    Patent
LА
    English
IC
    ICM G01N001-36
    ICS G01N035-00
     9-1 (Biochemical Methods)
    Section cross-reference(s): 7, 47
FAN.CNT 1
     PATENT NO.
                        KIND
                              DATE
                                                                DATE
                                          APPLICATION NO.
     -----
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                              ------
                                          ------
    WO 9845679
                        A1
                              19981015 WO 1998-US7246
                                                                19980407
        W: AU, CA, JP, KR, US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU; MC, NL,
            PT, SE
    AU 9868983
                         A1
                               19981030
                                          AU 1998-68983
                                                                19980407
PRAI US 1997-841983
                              19970408
                        A2
    WO 1998-US7246
                              19980407
CLASS
               CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
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                       _____
               ICM
WO 9845679
                       G01N001-36
                ICS
                      G01N035-00
WO 9845679
               ECLA
                     G01N035/00
   A method and apparatus are disclosed for optimizing the sequence of assays on
    an automated random access instrument so as to reduce reagent
     cross-contamination problems. A common vehicle for reagent
     cross-contamination is the reagent probe surface which transfers reagents
     for the various tests. When a plurality of assays are run on a single
     sample, an initial best path (order of assays) is identified, after which
     the iterative process of looking for a better alternative begins. This
    process involves the application of a knowledge base concerning
     relationships associated with random access cross-contamination, to search
    the state space. The search strategy for optimizing the steps involved in
    performing three assays (activated partial thromboplastin time,
    prothrombin time, and heparin) on an automated analyzer is shown.
ST
    clin analyzer assay optimization cross contamination; blood coagulation
    automated assay optimization
ΙT
    Blood coagulation
      Coagulation
        (assays; method and apparatus for optimizing assay sequencing on a random
       access clin. laboratory instrument so as to reduce reagent
       cross-contamination problems)
IT
    Analytical apparatus
       (automated; method and apparatus for optimizing assay sequencing on a random
       access clin. laboratory instrument so as to reduce reagent
```

cross-contamination problems)

```
IT
     Fibrinogens
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (coagulation assay; method and apparatus for optimizing assay sequencing on
        a random access clin. laboratory instrument so as to reduce reagent
        cross-contamination problems)
TΤ
     Computer application
        (expert systems; method and apparatus for optimizing assay sequencing on a
        random access clin. laboratory instrument so as to reduce reagent
        cross-contamination problems)
IT
     Blood analysis
        (method and apparatus for optimizing assay sequencing on a random access
        clin. laboratory instrument so as to reduce reagent cross-contamination
        problems)
IT
     9002-05-5, Thromboplastin
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (activated partial time coagulation assay; method and apparatus for
        optimizing assay sequencing on a random access clin. laboratory instrument so
        as to reduce reagent cross-contamination problems)
IT
     9005-49-6, Heparin, analysis
     RL: ANT (Analyte); BPR (Biological process); BSU (Biological study,
     unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); PROC (Process); USES (Uses)
        (anti-Xa coagulation assay; method and apparatus for optimizing assay
        sequencing on a random access clin. laboratory instrument so as to reduce
        reagent cross-contamination problems)
TТ
     9000-94-6, Antithrombin III
                                   9001-91-6, Plasminogen
                                                             60202-16-6, Protein
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (coagulation assay; method and apparatus for optimizing assay sequencing on
        a random access clin. laboratory instrument so as to reduce reagent
        cross-contamination problems)
     9001-26-7, Prothrombin 9002-04-4, Thrombin RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
ΙT
     (Biological study); USES (Uses)
        (time coagulation assay; method and apparatus for optimizing assay
        sequencing on a random access clin. laboratory instrument so as to reduce
        reagent cross-contamination problems)
RE.CNT
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Coville; US 4695430 A 1987
(2) Manabe; US 4971913 A 1990
(3) Mimura; US 5100622 A 1992
(4) Zakowski; US 4908320 A 1990
IT
     9002-04-4, Thrombin
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (time coagulation assay; method and apparatus for optimizing assay
        sequencing on a random access clin. laboratory instrument so as to reduce
        reagent cross-contamination problems)
     9002-04-4 HCAPLUS
RN
     Thrombin (8CI, 9CI)
CN
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
L54
     1998:494144 HCAPLUS
AN
DN
     129:126968
ED
     Entered STN: 07 Aug 1998
TT
     A randomized trial of solvent/detergent and standard fresh frozen plasma
     in the treatment of the coagulopathy seen during orthotopic liver
AU
     Freeman, Jonathan W.; Williamson, L. M.; Llewelyn, C.; Fisher, N.; Allain,
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J. P.; Bellamy, M.; Baglin, T. P.; Klinc, J.; Ala, F. A.; Smith,

```
N.; Neuberger, J.; Wreghitt, T.
CS
     Queen Elizabeth Hospital, Birmingham, B15 2TH, UK
so
     Vox Sanguinis (1998), 74 (Suppl.1), 225-229
     CODEN: VOSAAD; ISSN: 0042-9007
PB
     S. Karger AG
DT
     Journal
LА
     English
     63-2 (Pharmaceuticals)
CC
     Section cross-reference(s): 15
AB
     The clin. effectiveness of solvent/detergent treated pooled fresh frozen
     blood plasma (SDFFP) was assessed in the correction of the coagulopathy
     seen during Orthotopic Liver Transplantation (OLT) as compared with standard
     FFP. Patients with an underlying derangement of coagulation and who were
     due to undergo OLT were randomized to receive either FFP or SDFFP. They
     were assessed for side effects, correction of coaqulopathy, and
     seroconversion for viral markers. Patients undergoing OLT showed equal
     correction of clotting factors and partial thromboplastin time
     (PTT) when treated with FFP or SDFFP. There was also a similar time
     course to return to baseline values in each group. There was no
     difference in correction of INR in either group. Usage of other blood
     components during the operation was identical in the 2 groups. No
     seroconversions were seen for HIV, HBC, or HCV. Thus, SDFFP is an
     efficacious and safe source of coagulation factors for patients with liver
     disease undergoing Orthotopic Liver Transplantation. No adverse effects
     were seen during its administration.
ST
     coagulation factor blood serum solvent detergent
IT
     Antibodies
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
        (antibodies against HAV and parvovirus B19 in blood of patients given
        solvent/detergent and standard fresh frozen blood plasma)
TТ
     Blood serum
     Fibrinolysis
        (solvent/detergent and standard fresh frozen blood plasma in the treatment
        of the coagulopathy during liver transplantation)
IT
     Blood-coagulation factors
     Fibrinogens
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BSU (Biological study, unclassified); BIOL (Biological
     study); OCCU (Occurrence)
        (solvent/detergent and standard fresh frozen blood plasma in the treatment
        of the coagulopathy during liver transplantation)
     9001-24-5, Blood-coagulation factor V 9001-25-6, Blood-coagulation
                  9001-26-7, Factor II
                                        9001-27-8, Factor
            60202-16-6, Protein C
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BSU (Biological study, unclassified); BIOL (Biological
     study); OCCU (Occurrence)
        (solvent/detergent and standard fresh frozen blood plasma in the treatment
        of the coagulopathy during liver transplantation)
L54
    ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     1997:603023 HCAPLUS
DN
     127:246047
ED
     Entered STN: 22 Sep 1997
TΙ
     Properties of optical data from activated partial thromboplastin
     time and prothrombin time assays
AU
     Braun, Paul J.; Givens, Thomas B.; Stead, Andrew G.; Beck, Lisa R.; Gooch,
     Sheila A.; Swan, Robert J.; Fischer, Timothy J.
     Organon Teknika Corporation, Durham, NC, 27712, USA
CS
     Thrombosis and Haemostasis (1997), 78(3), 1079-1087
     CODEN: THHADQ; ISSN: 0340-6245
PΒ
     Schattauer
DT
     Journal
LΑ
     English
```

CC

13-5 (Mammalian Biochemistry)

```
Section cross-reference(s): 9
AB
     Changes in characteristics of optical transmittance data from coagulation
     assays were examined as a function of concentration of coaquilation proteins or
     anticoagulants. Transmittance data were collected for activated partial
     thromboplastin time (APTT) and prothrombin time (PT) assays from:
     1) plasmas prepared by mixing normal plasmas with deficient plasmas to give
     varying levels of coagulation proteins; 2) plasmas containing added heparin;
     and 3) 200 specimen plasmas that were also assayed for fibrinogen,
     coagulation factors, and other components. Optical profiles were
     characterized using a set of parameters describing onset and completion of
     coagulation, magnitude of signal change, rate of coagulation and other
     properties. Results indicated that parameters other than those typically
     reported for APTT and PT are associated with individual deficiencies, but
     that diagnosis of specimen status on the basis of optical data is complex.
     These results suggest possibilities for expanded interpretation of PT/APTT
     optical data for clin. or research applications.
ST
     blood anticoagulant thrombosis coagulation factor spectroscopy
IT
     Anticoagulants
     Blood analysis
       Blood coagulation
        (optical data from activated partial thromboplastin time and
        prothrombin time assays)
IT
     Blood-coagulation factors
     Fibrinogens
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
        (optical data from activated partial thromboplastin time and
        prothrombin time assays)
     9000-94-6, Antithrombin
                              9001-24-5, Blood-coagulation factor V
     9001-25-6, Blood-coagulation factor VII
                                              9001-26-7, Prothrombin
     9001-27-8, Factor VIII 9001-28-9, Factor IX 9001-29-0, Factor X
     9001-30-3, Blood-coagulation factor XII
                                              9002-05-5,
     Thromboplastin
                     9013-55-2, Blood-coagulation factor XI
     9035-58-9, Thromboplastin 72162-96-0,
     Thromboplastin
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
        (optical data from activated partial thromboplastin time and
        prothrombin time assays)
IT
     9035-58-9, Thromboplastin
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
        (optical data from activated partial thromboplastin time and
        prothrombin time assays)
RN
     9035-58-9 HCAPLUS
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54
    ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
     1996:276386 HCAPLUS
AN
DN
     124:332339
ED
     Entered STN: 11 May 1996
    Low-molecular-weight heparins and new strategies for the treatment of
TI
     patients with established venous thrombosis
ΔIJ
     Baglin, T. P.
CS
     Department Haematology, Cambridge, CB2 2QQ, UK
SO
     Haemostasis (1996), 26(Suppl. 2), 10-15
     CODEN: HMTSB7; ISSN: 0301-0147
PR
    Karger
DT
    Journal
LA
     English
CC
     1-8 (Pharmacology)
AB
     Unfractionated heparin is the commonest treatment for established venous
     thromboembolism. While this treatment undoubtedly reduces mortality and
```

morbidity there are problems associated with its use. It does not always

prevent thrombus propagation or embolization, the low bioavailability results in a frequent failure to achieve therapeutic heparin levels in vivo and the variable sensitivity of the partial thromboplastin time to the heparin effect may result in inappropriate heparin dosage. The low-mol.-weight heparins have high predictable bioavailability and can be administered as weight-calculated fixed-dose regimens for the treatment of established venous thromboembolism. While statistically significant clin. results are awaited, there is increasing evidence for the superior benefit-risk ratios for these agents compared to unfractionated heparin. In routine practice, the frequent failure to achieve a therapeutic intensity of anticoagulation is currently the main reason for adopting low-mol.-weight heparins for first-line treatment of venous thromboembolism. Cost anal. studies based on total health care costs may support the use of these drugs, because savings from the abolishment of laboratory monitoring, improved clin. outcome and shorter inpatient stay may prove treatment with low-mol. weight heparin to be more cost-effective than treatment with unfractionated heparin. heparin antithrombotic Anticoagulants and Antithrombotics (low-mol.-weight heparins and new strategies for the treatment of human patients with established venous thrombosis) Thrombosis

TT

IT

ST

(venous, low-mol.-weight heparins and new strategies for the treatment of human patients with established venous thrombosis)

IT 9005-49-6, Heparin, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(low-mol.-weight heparins and new strategies for the treatment of human patients with established venous thrombosis)

L54 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN

1994:625709 HCAPLUS AN

DN 121:225709

ED Entered STN: 12 Nov 1994

Properties of a new thromboplastin reagent based on recombinant TI tissue factor and synthetic phospholipids

ΑU Kolde, Hans Juergen; Hawkins, P.; Tejidor, L.; Denzler, B.; Ramirez, I.

CS Baxter Diagn., Unterschleissheim, D-85716, Germany

SO Klinisches Labor (1993), 39(10), 767-76

CODEN: KLLAEA; ISSN: 0941-2131

DT Journal

LΑ English

CC 9-15 (Biochemical Methods) Section cross-reference(s): 13, 63

AΒ The influence of various phospholipids on the relipidation process of the apoprotein and their influence on the properties of the title-reagent Innovin (I) is described. I does not tend to sediment and is less sensitive to heparin. I shows similar results as BCT. In the future, it will replace conventional thromboplastins to give an improvement of quality.

ST tissue factor phospholipid coagulation

thromboplastin innovin

TT Phospholipids, biological studies

> RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(properties of thromboplastin reagent based on recombinant tissue factor and synthetic phospholipids)

IT 9035-58-9, Blood-coagulation factor

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(properties of thromboplastin reagent based on recombinant tissue factor and synthetic phospholipids)

IT 9035-58-9, Blood-coagulation factor

```
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological
     study); USES (Uses)
        (properties of thromboplastin reagent based on recombinant
        tissue factor and synthetic phospholipids)
RN
     9035-58-9 HCAPLUS
CN
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     1994:529275 HCAPLUS
DN
     121:129275
ED
     Entered STN: 17 Sep 1994
     Properties of a new prothrombin time reagent based on recombinant
ΤI
     tissue factor and synthetic phospholipids
ΑU
     Kolde, Hans Juergen; Hawkins, P.; Tejidor, L.; Denzler, B.;
     Ramirez, I.
CS
     Baxter Diagn., Unterschleissheim, D-85716, Germany
     Klinisches Labor (1993), 39(7/8), 511-21
SO
     CODEN: KLLAEA; ISSN: 0941-2131
DТ
     Journal
     German
LA
CC
     9-15 (Biochemical Methods)
     The use of recombinant human tissue factor permits the
AB
     standardized production of thromboplastin reagents (Innovin, (I),
     Baxter Diagnostics). I, which is produced from synthetic phospholipids
     and recombinant tissue factor, has several advantages
     in comparison to conventional thromboplastins. Its turbidity is
     at least 10 fold less, and it does not tend to sediment. A better
     precision can therefore be achieved. In comparison to various other
     reagents, which were studied in parallel, it is less sensitive to heparin.
     Due to the excellent factor sensitivity of I, a better correlation between
     extrinsic factor concentration and prothrombin time is achieved in comparison to
     other sensitive thromboplastins. The results of I and British
     comparative thromboplastin (BCT) are very similar and very close
     to the mean values of factors II, VII and X in
     patients with stable oral anticoagulation.
ST
     prothrombin time reagent recombinant tissue factor;
     phospholipid prothrombin time reagent; thromboplastin reagent
     recombinant tissue factor
IT
     Blood coagulation
        (determination of, prothrombin time reagent for, recombinant tissue
        factor and synthetic phospholipids in)
TT
     Phospholipids, uses
     RL: USES (Uses)
        (in prothrombin time reagent)
TT
     9035-58-9, Tissue factor
     RL: ANST (Analytical study)
        (human recombinant, in prothrombin time reagent)
TТ
     9035-58-9, Tissue factor
     RL: ANST (Analytical study)
        (human recombinant, in prothrombin time reagent)
RN
     9035-58-9 HCAPLUS
CN
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN.
AN
     1993:423678 HCAPLUS
DN
     119:23678
ED
     Entered STN: 24 Jul 1993
     Preparation of prothrombin time reagents from recombinant human
     tissue factor and purified natural and synthetic
     phospholipids
ΙN
     Hawkins, Pamela L.; Tejidor, Liliana; Maynard, James; Johnson,
```

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Kevin B.
PA
     Baxter Diagnostics Inc., USA
     PCT Int. Appl., 31 pp.
so
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM G01N033-86
ICA A61K009-127
     7-1 (Enzymes)
     Section cross-reference(s): 9
FAN.CNT 1
     PATENT NO.
                        KIND
                              DATE
                                          APPLICATION NO.
                                                                 DATE
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ΡI
     WO 9307492
                        A1
                              19930415 WO 1992-US8281
                                                                 19920925
        W: AU, CA, JP
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE
                   AA 19930405
     CA 2097199
                                          CA 1992-2097199
                                                           19920925
     CA 2097199
                               20010508
                        С
                       A1
B2
    AU 9227692
                               19930503
                                          AU 1992-27692
                                                                 19920925
    AU 663343
                             19951005
    EP 565665
                                         EP 1992-921544
                                                                 19920925
                       A1
                              19931020
                              19980304
   · EP 565665
                        B1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE
    JP 06505562 T2
B2
                            19940623
                                         JP 1993-507008
                                                               19920925
                               20030616
                                         AT 1992-921544
ES 1992-921544
                       E
    AT 163768
                              19980315
                                                                19920925
     ES 2115679
                       T3 19980701
                                                                19920925
    US 5625036
                       A 19970429
                                          US 1995-371052
                                                                 19950110
PRAI US 1991-771294
WO 1992-US8281
US 1993-32562
                       A
A
                              19911004
                               19920925
                       B1 19930317
    US 1993-32562
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
 ______
 WO 9307492
                ICM G01N033-86
                ICA
                      A61K009-127
                      530/381.000; 435/013.000; 530/350.000
US 5625036
                NCL
                ECLA C07K014/745; G01N033/86
AB
     A prothrombin time reagent is disclosed for use in a prothrombin time
     test. The reagent uses recombinant human tissue factor
     , natural or synthetic phospholipids, Ca+2, and a buffer. Stabilizers and salts may also be included. A method for making lipid micelles containing
     tissue factor is also disclosed. By controlling the
     tissue factor source and purity and using highly
     purified lipids in conjunction with well-defined specific buffers and
     stabilizers, control of the performance of tissue factor
     in a prothrombin time reagent is improved. The effects on the assay of,
     e.g., varying recombinant human tissue factor concentration,
     varying recombinant human tissue factor:phospholipid
     ratio, and varying phospholipid fatty acid side chains are presented.
ST
     prothrombin time reagent tissue factor phospholipid;
     human tissue factor recombinant prothrombin time
IT
        (phosphatidylcholine from, mixts. with bovine phosphatidylserine, in
       prothrombin time determination with recombinant human tissue
       factor)
IT
     Cattle
        (phosphatidylserine from, mixts. with egg phosphatidylcholine, in
        prothrombin time determination with recombinant human tissue
        factor)
IT
     Buffer substances and systems
        (recombinant human tissue factor and phospholipids
        and calcium and, in prothrombin time reagent)
IT
     Phospholipids, biological studies
     RL: BIOL (Biological study)
        (recombinant human tissue factor and, in
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prothrombin time reagent)
TT
     Micelles
        (tissue factor-containing, preparation of, prothrombin time
        reagent in relation to)
ΙT
     148152-30-1 148154-41-0
                                  148154-42-1
                                                148154-43-2
                                                               148154-45-4
     148179-31-1
                   148179-32-2
                                  148179-33-3
                                                148200-14-0
                                                               148200-15-1
     148260-47-3
                   148261-07-8
                                  148261-08-9
                                                148346-16-1
                                                               148414-90-8
     RL: ANST (Analytical study)
        (in prothrombin time determination with recombinant human tissue
        factor)
IT
     9035-58-9, Blood-coagulation factor
     III
     RL: ANST (Analytical study)
        (phospholipids and recombinant human, in prothrombin time reagent)
IT
     81-81-2, Warfarin
     RL: ANST (Analytical study)
        (prothrombin time determination in patient receiving, reagent for, recombinant
        human tissue factor and phospholipids in)
IΤ
     10043-52-4, Calcium chloride, uses
     RL: USES (Uses)
        (prothrombin time reagent with recombinant human tissue
        factor and phospholipid mixture and)
IT
     7365-45-9, HEPES 28728-55-4, Polybrene
                                                68399-81-5, TAPSO
                                                                     56-40-6.
     Glycine, uses 7647-14-5, Sodium chloride, uses RL: ANST (Analytical study)
        (prothrombin time reagent with recombinant human tissue
        factor and phospholipid mixture and, tissue
        factor performance in relation to)
IT
     7440-70-2, Calcium, uses
     RL: USES (Uses)
        (recombinant human tissue factor and phospholipids
        and, in prothrombin time reagent)
IT
     9001-26-7, Prothrombin
     RL: ANST (Analytical study)
        (time, reagent for, recombinant human tissue factor
        and phospholipids in)
IT
     9035-58-9, Blood-coagulation factor
     RL: ANST (Analytical study)
        (phospholipids and recombinant human, in prothrombin time reagent)
RN
     9035-58-9 HCAPLUS
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L54 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
     1991:531408 HCAPLUS
AN
DN
     115:131408
ED
     Entered STN: 05 Oct 1991
TI
     Method of monitoring reagent delivery in a scanning spectrophotometer
TN
     Driscoll, Richard Cornelius; Fischer, Timothy J.
PΑ
     AKZO N. V., Neth.
SO
     PCT Int. Appl., 15 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
     ICM G01N021-00
IC
     ICS C08L089-00
CC
     9-5 (Biochemical Methods)
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                             APPLICATION NO.
                                                                    DATE
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                                             WO 1990-US7068
     WO 9108461
                          A1
                                19910613
                                                                    19901203
         W: AU, CA, FI, GR, JP, KR, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
     US 5068181
                          Α
                                19911126
                                             US 1989-443953
                                                                    19891201
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AU 9169512
                                19910626
                                                                   19901203
                         A1
                                           AU 1991-69512
    AU 655577
                        B2
                               19950105
     EP 502983
                        Al
                               19920916
                                           EP 1991-901116
                                                                   19901203
    EP 502983
                               19960828
                         B1
        {\tt R:} \quad {\tt AT, \ BE, \ CH, \ DE, \ DK, \ ES, \ FR, \ GB, \ GR, \ IT, \ LI, \ LU, \ NL, \ SE}
                 ъ,
ТЗ
                               19960915 AT 1991-901116
19970216 ES 1991-901116
    AT 142018
                                                                   19901203
    ES 2095310
                                                                  19901203
    CA 2069887
                        С
                               20040210
                                           CA 1990-2069887
                                                                  19901203
    JP 05502723
                        T2
                               19930513
                                           JP 1991-501583
                                                                  19911218
                        B2
    JP 2902108
                               19990607
     FI 9202478
                         Α
                               19920529
                                           FI 1992-2478
                                                                  19920529
     FI 101575
                         B1
                                19980715
PRAI US 1989-443953
                         Α
                                19891201
    WO 1990-US7068
                         Α
                               19901203
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
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 WO 9108461
                ICM
                       G01N021-00
                ICS
                       C08L089-00
US 5068181
                NCL
                       435/013.000; 356/039.000; 436/056.000; 436/069.000;
                       436/164.000; 436/166.000; 436/172.000; 436/800.000
    A method for measuring the concentration of a reagent in a reaction mixture
AB
     comprises: adding dye to a reagent until the dye is at a given concentration in
     the reagent; mixing the reagent with a specimen to form a reaction mixture,
     wherein the specimen comprises a component which reacts with the reagent
     to form a reaction product; measuring the formation of reaction product at
     a first spectral region; measuring the concentration of dye in the reaction mixture
     at a second spectral region in which the dye has an optical
     characteristic, such as absorption or fluorescence, the second spectral
     region being different from the first spectral region; and determining the
    concentration of the reagent in the reaction mixture based on the concentration of dye
    measure. In a further aspect of the invention there is provided a reagent
     containing a dye useful in the above method. Patent Blue VF was added to
     thromboplastin at 1.15 mg/L for a final concentration at 0.75 mg/L. A
     1-2% increase in prothrombin clotting occurred when the dye was added. No
    difference in the shape of the waveform at 565 nm was detected when dye
    was present, nor did the dye affect clot formation determination
ST
     reagent monitoring dye spectrophotometer; blood clotting assay reagent
    monitoring
    Blood analysis
IT
        (reagent monitoring in spectrophotometric, dyes for)
TT
    Blood coagulation
        (reagents for, monitoring of, in spectrophotometer, dyes for)
IT
        (reagents, monitoring, in spectrophotometer, dyes for)
IT
     Spectrometers
        (scanning, reagent monitoring in, dyes for)
TT
     81-88-9, Rhodamine B
    RL: ANST (Analytical study)
        (for calcium chloride monitoring in blood spectrophotometry)
IT
     129-17-9, Patent Blue VF
     RL: ANST (Analytical study)
        (for reagent monitoring in spectrophotometer)
ΙT
    9002-04-4, Thrombin 9002-05-5, Thromboplastin
     10043-52-4, Calcium chloride, biological studies
    RL: ANST (Analytical study)
        (monitoring, in spectrophotometer, dyes for)
IT
     9002-04-4, Thrombin
    RL: ANST (Analytical study)
        (monitoring, in spectrophotometer, dyes for)
RN
    9002-04-4 HCAPLUS
    Thrombin (8CI, 9CI)
                         (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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L55 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     2003:379625 HCAPLUS
DN
     139:385964
ED
     Entered STN: 19 May 2003
ТT
     Changes in functional activities of plasma fibrinogen after treatment with
     methylene blue and red light
ΑU
     Suontaka, Anna-Maija; Blomback, Margareta; Chapman, John
     Department of Surgical Sciences/Blood Coagulation Research, Karolinska
CS
     Institute, Stockholm, Swed.
     Transfusion (Malden, MA, United States) (2003), 43(5), 568-575
SO
     CODEN: TRANAT; ISSN: 0041-1132
PΒ
     Blackwell Publishing, Inc.
DT
     Journal
LΑ
     English
CC
     63-3 (Pharmaceuticals)
    Methylene blue (MB) plus light treatment used for virus inactivation of
AB
     human plasma units may lead to changes in the functional activities of
     fibrinogen. Single-donor units of fresh plasma were treated with 1.0
     μM MB and a red light dose of 48 μper cm2. The effects of MB plus
     red light treatment on fibrinogen clottability, fibrin
     polymerization and gelation, clot stabilization, and fibrinolysis were
     studied. The concentration of clottable fibrinogen was unchanged during MB plus
     red light treatment, but a light-dose-dependent decrease of the concentration of
     functional fibrinogen was found. The initial release rate of
     fibrinopeptide A was slightly increased after MB plus red light treatment.
     Turbidity measurements of fibrin gel showed prolonged clotting
     time, lower fibrin fiber mass-to-length ratio, and slightly
     smaller fiber diameter At a given clotting time, a gel with lower
     fibrin fiber mass-to-length ratio was produced. Clot stability
     and fibrinolysis remained normal. L-Histidine added to plasma before MB
     plus red light treatment normalized the thrombin-induced coagulation time
     in a dose-dependent way. MB plus red light treatment affected the
    polymerization and gelation phase of fibrin. A tighter
     fibrin gel structure was formed. No effect on stabilization of
     fibrin clot or fibrinolysis was found.
ST
    blood plasma methylene blue red light antiviral fibrinogen coagulation
    Antiviral agents
    Blood products
     Fibrinolysis
    Human
        (changes in functional activities of blood plasma fibrinogen after
        treatment with methylene blue and red light)
IT
     Fibrinogens
     Fibrins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (changes in functional activities of blood plasma fibrinogen after
        treatment with methylene blue and red light)
     Fibrinogen degradation products
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (fibrinopeptide A; changes in functional activities of blood plasma
        fibrinogen after treatment with methylene blue and red light)
TT
    Blood plasma
        (platelet-poor; changes in functional activities of blood plasma
        fibrinogen after treatment with methylene blue and red light)
```

IT

Light (red; changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)

TΤ Thrombus

(stability; changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)

IT Blood coagulation

> (time; changes in functional activities of blood plasma fibrinogen after treatment with methylene blue and red light)

Page 37

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IT
     9013-56-3, Blood-coagulation factor XIII 9035-58-9,
     Blood-coagulation factor III
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (changes in functional activities of blood plasma fibrinogen after
        treatment with methylene blue and red light)
     71-00-1, L-Histidine, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (changes in functional activities of blood plasma fibrinogen after
        treatment with methylene blue and red light)
IT
     61-73-4, Methylene blue
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (changes in functional activities of blood plasma fibrinogen after
        treatment with methylene blue and red light)
              THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
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(2) Blomback, B; Arkiv Kemi 1958, V12, P99 HCAPLUS
(3) Blomback, B; Biochim Biophys Acta 1989, V999, P225
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(5) Blomback, B; Thromb Res 1994, V76, P501
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(15) Fickenscher, K; Thromb Haemost 1991, V65, P535 HCAPLUS
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(24) Mohr, H; Immunol Invest 1995, V24, P73 MEDLINE
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IT
     9035-58-9, Blood-coagulation factor
     III
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (changes in functional activities of blood plasma fibrinogen after
        treatment with methylene blue and red light)
     9035-58-9 HCAPLUS
RN
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L55
    ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
     2000:434060 HCAPLUS
AN
     133:261152
DN
     Entered STN: 29 Jun 2000
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TI
     Hemostatic abnormalities associated with acute promyelocytic leukemia and
     corrective effects of all-trans-retinoic acid or arsenic trioxide
AU
     Zhao, Weili; Wang, Xuefeng; Guo, Weimin; Qu, Bin; Wang, Hongli; Shen,
     Zhixiang; Chen, Zhu; Wang, Zhenyi
     Ruijin Hospital, Shanghai Second Medical University, Shanghai, 200025,
CS
     Peop. Rep. China
SO
     Chinese Medical Journal (Beijing, English Edition) (2000),
     113(3), 236-240
     CODEN: CMJODS; ISSN: 0366-6999
PB
     Chinese Medical Association
DT
     Journal
LΑ
     English
     1-6 (Pharmacology)
CC
     Section cross-reference(s): 14
AB
     The objective was to study in vivo effect of all-trans-retinoic acid
     (ATRA) or arsenic trioxide (As203) on the expression of tissue
     factor (TF) and the hemostatic disorders, a series of parameters
     were measured in bone marrow blasts and plasma from acute promyelocytic
     leukemia (APL) patients. The plasma variables were measured by ELISA or
     chromogenic study. The TF transcription was assessed using reverse
     transcription-polymerase chain reaction technique (RT-PCR). The
     blast cell procoagulant activity (PCA), TF antigen of APL cell lysates, as well as the transcription of APL TF mRNA elevated at diagnosis, were
     reduced after ATRA or As203 therapy. The plasma level of platelet
     α-granular membrane protein-140, soluble fibrin monomer
     complex, thrombomodulin, tissue plasminogen activator and D-dimer significantly increased, fibrinogen, antigen level of protein C,
     plasminogen, \alpha2-plasminogen inhibitor and plasminogen activator
     inhibitor decreased at diagnosis, were restored to normal after complete
     remission but protein C activity and protein S remained elevated in ATRA
     group. Conclusions; There existed activation of platelets and consumption
     of anticoagulants as well as activation of coagulation and fibrinolytic
     system before treatment. Both ATRA and As203 therapy down-regulated the
     expression of TF mRNA, decreased the PCA and TF level in APL cells,
     inhibited coagulation activation, secondary hyperfibrinolysis and
     recorrected other hemostatic abnormalities, thus greatly improved the
     bleeding symptom in early stage of the treatment.
ST
     retinoate arsenic trioxide leukemia blood coagulation
IT
     Selectins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (P-; effects of retinoic acid and arsenic trioxide on hemostatic
        abnormalities associated with acute promyelocytic leukemia)
IT
     Blood-coagulation factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PCA (procoagulant activity); effects of retinoic acid and
        arsenic trioxide on hemostatic abnormalities associated with acute
        promyelocytic leukemia)
IT
     Platelet (blood)
        (activation; effects of retinoic acid and arsenic trioxide on
        hemostatic abnormalities associated with acute promyelocytic leukemia)
IT
     Antitumor agents
        (acute promyelocytic leukemía; effects of retinoic acid and arsenic
        trioxide on hemostatic abnormalities associated with acute promyelocytic
        leukemia)
IΤ
     Blood coagulation
     Fibrinolysis
     Hemorrhage
        (effects of retinoic acid and arsenic trioxide on hemostatic
        abnormalities associated with acute promyelocytic leukemia)
IT
     Fibrins
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RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)

```
(effects of retinoic acid and arsenic trioxide on hemostatic
        abnormalities associated with acute promyelocytic leukemia)
IT
     302-79-4, all-trans-Retinoic acid
                                         1327-53-3, Arsenic trioxide
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (effects of retinoic acid and arsenic trioxide on hemostatic
        abnormalities associated with acute promyelocytic leukemia)
TΤ
     9001-91-6, Plasminogen 9035-58-9, Blood-
     coagulation factor III
                              105844-41-5,
     Plasminogen activator inhibitor 138757-15-0
                                                      139639-23-9, Tissue
     plasminogen activator
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (effects of retinoic acid and arsenic trioxide on hemostatic
        abnormalities associated with acute promyelocytic leukemia)
RE.CNT
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(12) Tallman, M; Leuk Res 1996, V20, P13 HCAPLUS
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IT
     9035-58-9, Blood-coagulation factor
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (effects of retinoic acid and arsenic trioxide on hemostatic
        abnormalities associated with acute promyelocytic leukemia)
RN
     9035-58-9 HCAPLUS
CN
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L55 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     2000:414580 HCAPLUS
DN
     133:26632
ED
     Entered STN: 22 Jun 2000
TI
     Simvastatin attenuates vascular hypercoagulability in cardiac transplant
ΑU
     Holschermann, Hans; Hilgendorff, Anne; Kemkes-Matthes, Bettina; Schonburg,
     Markus; Bauer, Erwin P.; Tillmanns, Harald; Haberbosch, Werner
CS
     Department of Internal Medicine, Division of Cardiology,
     Justus-Liebig-University Giessen, Giessen, D-35392, Germany
SO
     Transplantation (2000), 69(9), 1830-1836
     CODEN: TRPLAU; ISSN: 0041-1337
PB
     Lippincott Williams & Wilkins
DT
     Journal
LA
     English
CC
     1-8 (Pharmacology)
     Background. 3-Hydroxy-3-methylglutaryl CoA (HMG-CoA) reductase inhibitors
AB
     have been shown to reduce cardiac allograft failure and to lower the
     incidence of transplant coronary artery disease. These effects result
     from as yet unknown mechanisms not clearly attributable to lipid lowering.
     We here report that low-dose simvastatin treatment inhibits excessive
     expression of monocyte tissue factor (TF) and reduces
     the persistent hypercoagulability state seen in cardiac transplant
     recipients. Methods. Fifteen consecutive heart transplant recipients
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Page 40

receiving standard oral immunosuppression were newly assigned to a 10 mg daily simvastatin therapy. Levels of TF activity in both unstimulated and lipopolysaccharide-stimulated peripheral blood mononuclear cells drawn from transplant recipients before and under simvastatin therapy were evaluated by one-stage clotting assay. Results. Monocyte TF activity was found to be significantly increased in cardiac transplant recipients when compared with healthy controls. Excessive monocyte procoagulant activity was reduced in cardiac transplant recipients during simvastatin treatment. This effect occurred independently of the reduction of serum low-d. lipoprotein cholesterol. As demonstrated by reverse transcriptasepolymerase chain reaction, monocyte TF reduction by simvastatin, observed in 13 of the 15 transplant recipients investigated, could be ascribed to an inhibition of monocyte TF gene transcription. The reduction of monocyte TF activity during treatment with simvastatin paralleled with the normalization of elevated levels of thrombin-antithrombin complex, prothrombin fragment F1+2, and D-dimer, which are markers of thrombin and fibrin formation indicating coagulation activation after cardiac transplantation. Conclusion. Inhibition of monocyte TF expression and attenuation of the persistent hypercoagulable state observed in cardiac transplant recipients during treatment with simvastatin may represent an important mechanism by which HMG-CoA reductase inhibitors protect against the development of transplant

ST simvastatin hypercoagulability heart transplant cardioprotectant

IT Blood-coagulation factors

coronary artery disease.

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(PCA (procoagulant activity); simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans) Cytoprotective agents

(cardioprotective; simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

IT Transplant and Transplantation

Transplant and Transplantation

(heart; simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

IT Blood coagulation

(hypercoagulability; simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

IT Heart

IT

(transplant; simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

IT 79902-63-9, Simvastatin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(simvastatin attenuates vascular hypercoagulability in cardiac transplant recipient humans)

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- L55 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
- AN 1998:391625 HCAPLUS
- DN 129:132855
- ED Entered STN: 26 Jun 1998
- Prevention of the influence of fibrin and $\alpha 2$ -macroglobulin in the continuous measurement of the thrombin potential: implications for an endpoint determination of the optical density
- ΑU Rijkers, Dirk T. S.; Wielders, Simone J. H.; Beguin, Suzette; Hemker, H. Coenraad
- CS Faculty of Medicine, Department of Biochemistry and Cardiovascular Research Institute, Maastricht University, Maastricht, 6200 MD, Neth.
- Thrombosis Research (1998), 89(4), 161-169 SO CODEN: THBRAA; ISSN: 0049-3848
- PB Elsevier Science Inc.
- DT Journal
- LΑ English
- CC 7-1 (Enzymes)
- Section cross-reference(s): 14
- We proposed the endogenous thrombin potential (ETP) as an overall function test of the coagulation system. We recently introduced a routine test which requires defibrinated plasma. In order to develop an assay in which the ETP-value can be directly obtained by measuring the optical d., we investigated two methods to inhibit fibrinogen clottability and to inactivate \alpha2-macroglobulin. The first method makes use of hydroxylamine to inactivate \alpha2-macroglobulin and H-Gly-Pro-Arg-Pro-OH to inhibit fibrin polymerization At pH 7.35, plasma incubated with 25 mM hydroxylamine and 1.5 mg/mL H-Gly-Pro-Arg-Pro-OH for 5 min at 37° resulted in a reduced end level of the amidolytic activity on small chromogenic substrates. second method uses a metalloprotease purified from Crotalus basiliscus to remove @2-macroglobulin from plasma in combination with H-Gly-Pro-Arg-Pro-OH. Herein plasma is incubated with 3.5 μM protease during 15 min at 37° in the presence of 1 mg/mL polymerization inhibitor. The enzymic method results in a zero end level of the amidolytic activity and this would imply that measurement of the ETP is reduced to an endpoint determination of the optical d. We show that the endpoint

```
determination of the optical d. correlates well with the calculated ETP in plasmas
     with different degrees of anticoagulation.
ST
     thrombin endpoint detn fibrin alpha2 macroglobulin
IT
     Blood analysis
       Blood coagulation
     Densitometry (optical)
       Polymerization inhibitors
         (prevention of influence of fibrin and α2-macroqlobulin
         in continuous measurement of thrombin potential for optical d. endpoint
         determination)
IT
     Fibrins
     RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST
      (Analytical study); BIOL (Biological study); USES (Uses)
         (prevention of influence of fibrin and \alpha2-macroglobulin in
         continuous measurement of thrombin potential for optical d. endpoint
         determination)
IT
     Macroglobulins
     RL: ARU (Analytical role, unclassified); THU (Therapeutic use); ANST
      (Analytical study); BIOL (Biological study); USES (Uses)
         (\alpha 2-; prevention of influence of fibrin and \alpha 2-
         macroglobulin in continuous measurement of thrombin potential for
         optical d. endpoint determination)
TT
     9002-04-4, Thrombin
     RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
         (prevention of influence of fibrin and \alpha 2-macroglobulin in
         continuous measurement of thrombin potential for optical d. endpoint
         determination)
     181017-16-3
IT
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
         (prevention of influence of fibrin and α2-macroglobulin in
         continuous measurement of thrombin potential for optical d. endpoint
         determination)
TT
     7803-49-8, Hydroxylamine, biological studies
                                                         9001-92-7D, Protease,
     complexes with myoglobin 9035-58-9, Blood-
                               67869-62-9
     coagulation factor III
     81669-70-7, Metalloprotease
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
         (prevention of influence of fibrin and α2-macroglobulin in
         continuous measurement of thrombin potential for optical d. endpoint
        determination)
RE.CNT
        32
               THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
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 - urokinase may contribute to the initiation of atherosclerosis by inducing P-selectin and platelet activating factor as well as to plaque rupture, either directly or indirectly, by activating metalloproteinases. Plasminogen activator inhibitor-1 inhibits smooth muscle cell migration and, in the presence of vitronectin, promotes the clearance of thrombin by LDL receptor-related protein at sites of endothelial injury.

inactivating tissue factor pathway inhibitor.
Intravascular fibrinolysis induced by tissue-type plasminogen activator or

review thrombosis atherosclerosis protein

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IT
     Atherosclerosis
       Thrombosis
        (thrombosis and atherosclerosis in humans in relation to involved
        proteins)
IT
     Proteins, general, biological studies
     RL: ADV (Adverse effect, including toxicity); BOC (Biological occurrence);
     BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); OCCU (Occurrence); PROC (Process)
        (thrombosis and atherosclerosis in humans in relation to involved
        proteins)
RE.CNT
        89
              THERE ARE 89 CITED REFERENCES AVAILABLE FOR THIS RECORD
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- L55 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
- 1995:971371 HCAPLUS
- DN 124:83649
- ED Entered STN: 08 Dec 1995
- TI Procoagulant activity after exposure of monocyte-derived macrophages to minimally oxidized low density lipoprotein. Co-localization of tissue factor antigen and nascent fibrin fibers at the cell surface
- Lewis, Jon C.; Bennett-Cain, Andrea L.; DeMars, Carl S.; Doellgast, George ΑU
- J.; Grant, Kenneth W.; Jones, Nancy L.; Gupta, Madhu Bowman Gray School Medicine, Wake Forest University, Winston-Salem, NC, CS 27157-1092, USA
- American Journal of Pathology (1995), 147(4), 1029-40 SO CODEN: AJPAA4; ISSN: 0002-9440
- PΒ American Society for Investigative Pathology
- DTJournal
- LΑ English
- CC 14-5 (Mammalian Pathological Biochemistry)
- AB The role of tissue factor (TF) as an initiator of the thrombotic complications secondary to atherosclerosis has been acknowledged, and in situ expression of TF activity by monocyte-derived macrophages and lesion-associated macrophage foam cells has been documented. Macrophages express TF activity upon exposure in vitro to either oxidized low d. lipoprotein LDL (Ox-LDL) or endotoxin (lipopolysaccharide). This activity has been associated with membrane vesicles that apparently are shed after procoagulant expression. The present study, based upon the correlative use of an enzyme-linked coagulant assay and 3-dimensional multi-antigen, immunogold electron microscopy, reports the ultrastructural localization of TF antigen and spatially correlates TF with Ox-LDL binding and the presence of nascent fibrin polymers on the

plasma membrane of cultured macrophages. Pigeon monocyte/macrophages, after a 4-h induction with lipopolysaccharide (2 µg/mL) or minimally oxidized LDL (50 µg/mL; thiobarbituric acid reducing substance, 5-8 nmol/mg protein) were incubated for 40 min in a Tris-buffered medium containing factors VII, V, X, II, and I before either assaying for coagulant activity or processing for gold-colloid cytochem. TF activity, as measured by enzyme-linked coagulant assay peaked 6 h after agonist exposure with lipopolysaccharide and Ox-LDL giving, resp., 115- and 60-fold stimulation as compared with control. This activity corresponded to the elaboration of membrane ruffles and microvilli on the cell surfaces. Through correlative immunogold cytochem. (15-nm-diameter colloid) and gold-ligand cytochem. (30-nm-diameter colloid), TF antigen (83%) and Ox-LDL (78%) were primarily associated with the membrane ruffles and microvilli. Multi-antigen immunogold cytochem. when used in conjunction with ligand-gold cytochem. documented co-localization of Ox-LDL (22-nm gold), TF antigen (15-nm gold), and a delicate 3-dimensional network of short fibrin fibers that were decorated in a linear fashion with the immunogold probes (30-nm gold). Thus, TF antigen is located at selected regions on the cell surfaces. Furthermore, these same regions provide binding sites for agonist uptake and organization sites for fibrin polymerization Hypothetically, the localized membrane regions could be shed from the cell surface as a means for regulating coagulation potential. tissue factor fibrin macrophage atherosclerosis thrombosis Cell membrane Macrophage Thrombosis (co-localization of tissue factor antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis) Fibrins RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence) (co-localization of tissue factor antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis) Arteriosclerosis (atherosclerosis, co-localization of tissue factor antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis) Lipoproteins RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (low-d., oxidized, co-localization of tissue factor antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis) 9035-58-9, Blood-coagulation factor RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence) (co-localization of tissue factor antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to monocyte/macrophage role in atherosclerosis-related thrombosis) 9035-58-9, Blood-coagulation factor III RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence) (co-localization of tissue factor antigen and fibrin fibers at cell surface after exposure of monocyte-derived macrophages to oxidized low d. lipoprotein in relation to

ST

IT

IT

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IT

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monocyte/macrophage role in atherosclerosis-related thrombosis)
RN
     9035-58-9 HCAPLUS
                                         (CA INDEX NAME)
CN
     Blood-coagulation factor III (9CI)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L55 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     1995:572694 HCAPLUS
DN
     123:6401
     Entered STN: 25 May 1995
ED
     The thrombin activation pathway modulates the assembly, structure and
     lysis of human plasma clots in vitro
ΑU
     Torbet, Jim
CS
     Lab. Elaboration Proc. Magnet., CNRS, Grenoble, Fr.
SO
     Thrombosis and Haemostasis (1995), 73(5), 785-92
     CODEN: THHADQ; ISSN: 0340-6245
PB
     Schattauer
DT
     Journal
     English
T.A
CC
     13-5 (Mammalian Biochemistry)
AB
     Thrombin activation of the soluble plasma protein fibrinogen is vital for
     successful hemostasis. Thrombin is generated from prothrombin by the
     prothrombinase complex which also includes factor Xa, factor Va, Ca2+ and a procoagulant membrane surface. Factor X activation is catalyzed in a
     complex including either factor VIIa and tissue factor
      or factor IXa and factor VIIIa. Factor IXa can be generated either by
     the factor VIIa/tissue factor complex or by
     factor XIa which is in turn produced by the contact phase reactions in
     vitro. Once activated, fibrinogen develops into the fibrin
     polymeric matrix at the site of injury. It is not known to what
     extent the properties of this hemostatic plug are sensitive to the pathway
     leading up to thrombin generation. Here static human plasma is studied in
     vitro using magnetically induced birefringence. It is shown that the
     contact phase/factor XIa pathway gives rise to linear fibrin
     assembly progress curves whereas the factor VIIa/tissue
     factor activation of factor X provokes largely sigmoid assembly.
    The latter pathway also causes the formation of significantly thicker
     fibers even although assembly is more rapid. This result is the inverse
     of that anticipated from the study of simple model systems. While the
     streptokinase activated lysis of both types of clot exhibits similar
    biphasic kinetics, an exponential main phase followed by a sigmoidal
     tailing off, the data suggest that clots produced by the contact
    phase/factor XIa pathway are more recalcitrant to lysis. These results
     demonstrate that the profile of thrombin generation not only
     dets. the kinetics of assembly but also influences the rate of lysis and
     structure of the haemostatic plug.
ST
    thrombin activation blood clot assembly structure
    Fibrins
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (the contact phase/factor XIa pathway gives rise to linear fibrin
        assembly progress curves)
IT
    Blood coagulation
    Fibrinolysis
       Thrombus and Blood clot
        (the thrombin activation pathway modulates the assembly, structure and
        lysis of human plasma clots in vitro)
ŤΤ
    37203-61-5, Blood-coagulation factor XIa
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (contact phase-factor XIa pathway cause linear fibrin assembly in
        humans)
TT
    9001-29-0, Blood-coagulation factor X 9035-58-9, Blood
     -coagulation factor III
                               65312-43-8,
    Blood-coagulation factor VIIa
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
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(Biological study); PROC (Process)
        (factor VIIa-tissue factor activation of
        factor X provokes largely sigmoid fibrin assembly in humans)
IT
     9002-01-1, Streptokinase
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (fibrinolysis kinetics of blood clot types in human)
     9002-04-4, Thrombin
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (the thrombin activation pathway modulates the assembly, structure and
        lysis of human plasma clots in vitro)
IT
     9035-58-9, Blood-coagulation factor
     III
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (factor VIIa-tissue factor activation of
        factor X provokes largely sigmoid fibrin assembly in humans)
RN
     9035-58-9 HCAPLUS
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L55
     ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
     1993:260779 HCAPLUS
ΑN
DN
     118:260779
ED
     Entered STN: 26 Jun 1993
     Human coagulation factor IX: assessment of thrombogenicity in animal
ΤI
     models and viral safety
     Herring, Steven W.; Abildgaard, C.; Shitanishi, K. T.; Harrison, J.;
     Gendler, S.; Heldebrant, C. M.
     Alpha Therapeutic Corp., Los Angeles, CA, 90032, USA
CS
     Journal of Laboratory and Clinical Medicine (1993), 121(3),
SO
     394-405
     CODEN: JLCMAK; ISSN: 0022-2143
DT
     Journal
     English
LA
     63-3 (Pharmaceuticals)
     Section cross-reference(s): 1
AR
     Thromboembolic complications associated with prothrombin complex concentrate
     treatment may be related to the high levels of factors
     II and X in these products. We report here results from preclin.
     safety studies with a human coagulation factor IX product (AlphaNine) that
     contains no detectable factor II or VII and less than
     10 units of factor X/100 units of factor IX. This product was manufactured
     from virally inactivated factor IX complex with a barium citrate
     adsorption step followed by affinity chromatog. yielding factor IX concentrate with a specific activity of about 86 factor IX units/mg protein.
     Electrophoresis and immunoblot anal. indicated that the factor IX
     represents about 65% of the protein in this product. The virus
     inactivation step incorporated into the manufacturing process (incubation with
     n-heptane at 60° for 20 h) was shown to inactivate at least 8.6
     logs of type 1 human immunodeficiency virus. The barium citrate
     adsorption and affinity chromatog. steps were found to remove 2.0 logs of
     the marker virus, vaccinia, and the DEAE ion-exchange chromatog. used to
     produce factor IX complex was found to remove 1.4 logs of the marker
     virus, Sindbis. Anal. of 3 sep. manufacturing lots with the polymerase
     chain reaction revealed no evidence of hepatitis C virus. The purified
     factor IX was nonthrombogenic when tested at doses of 450 units/kg in a
     rabbit stasis (Wessler) model, whereas the prothrombin complex concs. were
     found to be thrombogenic at doses of less than 50 units/kg. There was no
     evidence of DIC in a porcine model after infusion of 200 units/kg of
     coagulation factor IX, as manifested by neg. fibrin monomer
     tests, the absence of fibrin in blood vessels at autopsy, little
     or no change in prothrombin times and partial thromboplastin
     times, and only moderate decreases in platelet levels after infusion.
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ST blood coagulation factor IX thrombogenicity safety IT Thrombosis (from human blood coagulation factor IX concs., lack of, in evaluation study) IT Virus, animal (human blood coagulation factor IX concs. safety in relation to) TT 9001-28-9, Blood coagulation factor IX RL: BIOL (Biological study) (concs., thrombogenicity and viral safety of human) L55 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN 1991:243874 HCAPLUS DN 114:243874 ΕD Entered STN: 28 Jun 1991 Dry reagent technology for rapid, convenient measurements of blood TI coagulation and fibrinolysis ΑU Oberhardt, Bruce J.; Dermott, Sharon C.; Taylor, Murdock; Alkadi, Zaid Y.; Abruzzini, Anthony F.; Gresalfi, Nancy J. CS Cardiovasc. Diagn., Inc., Research Triangle Park, NC, 27709, USA Clinical Chemistry (Washington, DC, United States) (1991), SO 37(4), 520-6 CODEN: CLCHAU; ISSN: 0009-9147 DTJournal LΑ English CC 9-15 (Biochemical Methods) AB Rapid coagulation and fibrinolysis assays suitable for use with an imprecisely measured sample volume (either whole blood or plasma) have been developed, utilizing a technol. based on paramagnetic iron oxide particles (PIOP) that move in response to an oscillating magnetic field. PIOP are combined with appropriate test reagents for clotting and thrombolysis assays and formulated as dry reagents within a capillary test chamber. The min. and maximum of the PIOP oscillations define a 2-sided waveform that provides kinetic information on fibrin polymerization and lysis. Subject to the chemical of the dry reagent formulation, the resulting waveform can be used to define clotting time, lysis onset time, or fibrinogen variables. Applications to 1-stage prothrombin time and 1-stage activated partial thromboplastin time tests have yielded assays with consistently good correlations with other test methods. Applications to fibrinolysis studies have yielded global assays of thrombolytic activity, in that the assay results reflect the interactions of multiple factors associated with the effectiveness of thrombolytic therapy. Depending on the components utilized in a particular reagent formulation, one can derive information about the activity of such factors as fibrinogen, plasminogen, and related inhibitors, as well as the lytic agent being administered. Use of these assays in a clin. setting should provide a rapid, convenient alternative to conventional testing of coagulation variables and a reliable method for monitoring thrombolytic therapy. ST dry reagent blood coagulation fibrinolysis detn IT Blood coagulation Fibrinolysis (determination of, dry reagent technol. for) IT 1332-37-2, Iron oxide, analysis RL: ANST (Analytical study) (paramagnetic, particles, dry reagent formulations containing, for blood coagulation and fibrinolysis determination) ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN L55 1990:136754 HCAPLUS AN DN 112:136754 ED Entered STN: 13 Apr 1990 TI Activation of endothelial cells induces platelet thrombus formation on their matrix. Studies of new in vitro thrombosis model with low molecular weight heparin as anticoagulant AU Zwaginga, Jaap J.; Sixma, Jan J.; De Groot, Philip G. Dep. Hematol., Univ. Hosp. Utrecht, Utrecht, 3508GA, Neth.

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so
     Arteriosclerosis (Dallas) (1990), 10(1), 49-61
     CODEN: ARTRDW; ISSN: 0276-5047
TC
     Journal
LΑ
     English
     14-5 (Mammalian Pathological Biochemistry)
     Section cross-reference(s): 9
     The authors studied the effect of endothelial cell activation and
AR
     subsequent tissue factor synthesis on thrombus
     formation on the extracellular matrix in flowing blood. Endothelial cells
     were stimulated with tumor necrosis factor, endotoxin, or phorbol ester.
     Coverslips with activated cells or their extracellular matrix were
     introduced into a perfusion system and exposed to blood anticoagulated
     with 20 U/mL low mol. weight heparin. This concentration allowed manipulation of
     blood without activation of the coagulation cascade. Platelet deposition
     and fibrin formation were evaluated by morphometry, and
     fibrinopeptide A formation was assayed as a measure of thrombin
     generation. Activation of endothelial cells caused fibrinopeptide A
     generation in the perfusate and some deposition of fibrin on
     endothelial cells; however, platelets were not deposited. The matrix of
     the stimulated endothelium also caused enhanced fibrinopeptide A
     generation, and platelet aggregates and fibrin were deposited on
     the matrix. Maximal effects were observed with stimulation periods between 4
     and 10 h and were still clearly present after 18 h. Increase in shear
     rate, perfusion time, and platelet number resulted in an increase in platelet
     adhesion, but platelet aggregate formation as a percentage of adhesion
     remained constant Platelet aggregate formation and fibrinopeptide A
     generation were inhibited with antibodies against tissue
     factor or factor VIIa. Platelet aggregate formation alone was
     inhibited by antibodies against glycoprotein IIb/IIIa. Polymerization
     of fibrin on the matrix was best supported in perfusions at a
     low shear rate. The new in vitro thrombosis model presented here provides
     a powerful tool for study of the regulation of thrombogenesis by the
     vessel wall in response to various stimuli.
     thrombosis model endothelium activation heparin
TΥ
     Blood coagulation
        (cascade, platelet and subendothelial interactions with, in vitro model
        for study of)
TТ
     Fibrins
     RL: PEP (Physical, engineering or chemical process); PROC (Process) (deposition of, in in vitro thrombosis model)
IT
     Blood platelet
        (deposition of, in in vitro thrombosis model, tissue
        factor in relation to)
ΙT
     Lipopolysaccharides
     RL: BIOL (Biological study)
        (endothelial cell activation from, tissue factor
        and thrombin formation after, in in vitro thrombosis model)
IT
     Thrombosis
        (model for, in vitro, tissue factor and
        thrombin formation in, low-mol.-weight heparin in relation to)
TΤ
     Glycoproteins, specific or class
     RL: BIOL (Biological study)
        (IIIa, complexes, with glycoprotein IIb, thrombin formation
        by activated endothelial cells in in vitro thrombosis model in relation
        to)
ΙT
     Glycoproteins, specific or class
     RL: BIOL (Biological study)
        (IIb, complexes, with glycoprotein IIIa, thrombin formation
        by activated endothelial cells in in vitro thrombosis model in relation
        to)
TT
     Lymphokines and Cytokines
     RL: BIOL (Biological study)
        (tumor necrosis factor, endothelial cell activation from,
        tissue factor and thrombin formation after,
        in in vitro thrombosis model)
IT
     9001-29-0, Blood-coagulation factor X
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RL: BIOL (Biological study)
        (-factor VIIa pathway, thrombin formation in in vitro
        thrombosis model in relation to)
TT
     65312-43-8, Blood-coagulation factor VIIa
     RL: BIOL (Biological study)
        (-factor X pathway, thrombin formation in in vitro thrombosis
        model in relation to)
IT
     16561-29-8
     RL: BIOL (Biological study)
        (endothelial cell activation from, tissue factor
        and thrombin formation after, in in vitro thrombosis model)
IT
     9001-28-9, Blood-coagulation factor IX
     RL: BIOL (Biological study)
        (factor VIIa pathway, thrombin formation in in vitro
        thrombosis model in relation to)
IT
     9035-58-9, Blood-coagulation factor
     III
     RL: FORM (Formation, nonpreparative)
        (formation of, after endothelial cell activation in in vitro thrombosis
IT
     9002-04-4, Thrombin
     RL: FORM (Formation, nonpreparative)
        (formation of, in in vitro thrombosis model)
     9005-49-6, Heparin, biological studies
IT
     RL: BIOL (Biological study)
        (fragmin, as anticoagulant, in in vitro thrombosis model)
IT
     9035-58-9, Blood-coagulation factor
     III
     RL: FORM (Formation, nonpreparative)
        (formation of, after endothelial cell activation in in vitro thrombosis
        model)
RN
     9035-58-9 HCAPLUS
CN
     Blood-coagulation factor III (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9002-04-4, Thrombin
IT
     RL: FORM (Formation, nonpreparative)
        (formation of, in in vitro thrombosis model)
RN
     9002-04-4 HCAPLUS
     Thrombin (8CI, 9CI)
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L55 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
     1988:471385 HCAPLUS
AN
DN
     109:71385
     Entered STN: 02 Sep 1988
ED
ΤI
     Fibrinogen New York II, III, and IV: relationship between abnormal
     fibrin monomer polymerization, bleeding tendency, and
     thrombotic tendency
ΑU
     Liu, Chung Y.; Karp, George
CS
     Columbia Univ., New York, NY, USA
     International Congress Series (1987), 745 (Fibrinogen 2), 53-6
SO
     CODEN: EXMDA4; ISSN: 0531-5131
DΤ
     Journal
LA
     English
CC
     14-6 (Mammalian Pathological Biochemistry)
AB
     The occurrence of 3 new abnormal human fibrinogen variants, designated New
     York II, III, and IV, is reported. All 3 patients had prolonged
     thrombin time, reptilase time, partial thromboplastin
     time, and prothrombin time. Blood plasma fibrinogen levels were low-normal or below-normal. There was no indication of an excessive
     bleeding tendency or thrombotic tendency in the patients, suggesting that
     abnormal fibrinogen structure is not necessarily correlated with bleeding
     and/or thrombotic tendency.
ST
     fibrinogen variant New York hemorrhage thrombosis
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IT
     Hemorrhage
       Thrombosis
        (fibrinogens New York II and III and IV in relation to, in humans)
IT
     Fibrinogens
     RL: BIOL (Biological study)
        (New York II, bleeding and thrombotic tendency association with, in humans)
IT
     RL: BIOL (Biological study)
        (New York III, bleeding and thrombotic tendency association with, in
        humans)
TТ
     Fibrinogens
     RL: BIOL (Biological study)
        (New York IV, bleeding and thrombotic tendency association with, in humans)
    ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
     1980:421947 HCAPLUS
AN
DN
     93:21947
ED
     Entered STN: 12 May 1984
ΤI
     Nephelometric measurements for blood coagulation analyses
     Noren, I.; Blombaeck, M.; Unger, P.; Oehlin, E.
ΔII
     Dep. Blood Coagulation Disord., Karolinska Sjukhuset, Stockholm, Swed.
CS
SO
     Proceedings of the Serono Symposia (1979), Volume Date 1977,
     15 (Haemostasis Thromb.), 635-40
     CODEN: PSSYDG; ISSN: 0308-5503
DT
     Journal
LΑ
     English
     9-4 (Biochemical Methods)
CC
     Section cross-reference(s): 13
AB
     An instrument is described for nephelometric measurements of
     fibrin polymerization and coagulation end-point detns. The
     instrument (Trombometer 761) was used for various routine coagulation
     tests such as prothrombin time, activated partial thromboplastin
     time (APTT), and fibrinogen detns. with fibrin polymerization
     time. It was also used for measuring thrombin times, and in a 2-stage
     coagulation assay. In the APTT assay, the instrument registered shorter
     coagulation times than those obtained by manual testing and visual
     inspection. The drawback of the instrument is that only plasma, and not
     whole blood samples, can be measured. Moreover, the plasma must not be
     too lipemic or turbid.
ST
     plasma fibrin polymn detn; nephelometry fibrin
     polymn; blood coagulation detn nephelometer
IT
     Blood coagulation
        (determination of, in blood plasma, nephelometer for)
IT
     Nephelometers
        (for blood coagulation tests)
ΙT
     Fibrins
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (polymerization of, in blood plasma, nephelometer for determination of)
    ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
     1978:59853 HCAPLUS
AN
DN
     88:59853
ED
     Entered STN: 12 May 1984
TT
     Nephelometric measurements for blood coagulation analyses
ΑU
     Noren, I.; Blombaeck, M.; Unger, P.; Oehlin, E.
CS
     Klin.-Kem. Lab., Soedersjukhuset, Stockholm, Swed.
SO
     Aerztliche Laboratorium (1977), 23(11), 518-24
     CODEN: AELAAH; ISSN: 0001-9526
DT
     Journal
T.A
     English
CC
     9-4 (Biochemical Methods)
     Section cross-reference(s): 13
AB
     A new semiautomated apparatus, the Trombometer 761, for nephelometric
     measurement of fibrin formation was applied to various
     coagulation assays. For plasma prothrombin complex, similar clotting
     times, and for activated partial thromboplastin time (APTT)
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shorter clotting times, were registered with the instrument than with manual testing. Low coagulation factor activity as well as heparin concentration of .apprx. 0.1-1 IU/mL plasma could be assessed with most APTT reagents. Distribution of values was similar as with manual testing but increased with heparin concentration Plasma fibrinogen concentration assessed by a fibrin polymerization time test gave similar values with the instrument as with a fibrin switch instrument. The instrument proved well suited for the assay of plasma heparin concentration by means of a thrombin time method demanding high sensitivity and for a 2-stage factor VIII assay for which exact timing and good precision is required. Thus the apparatus was suitable for end-point detns. of coagulation assays in plasma samples, especially for those demanding high sensitivity and exact timing. The plasma must not be lipemic or turbid. blood coagulation test nephelometer; fibrin formation nephelometer; heparin detn plasma app; fibrinogen detn plasma app; prothrombin detn plasma app; thromboplastin test nephelometer Fibrinogens RL: ANT (Analyte); ANST (Analytical study) (determination of, in blood plasma, nephelometer for) Blood coaquiation (determination of, nephelometer for) Blood analysis (fibrins and fibrinogens and heparin determination in, nephelometer for) **Fibrins** RL: MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative) (formation of, determination of, nephelometer for) Nephelometers (automated, for blood coagulation anal.) 9001-26-7D, complexes 9001-27-8 9005-49-6, analysis RL: ANT (Analyte); ANST (Analytical study) (determination of, in blood plasma, nephelometer for) ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN 1976:474524 HCAPLUS 85:74524 Entered STN: 12 May 1984 The effects of Hepes buffer on clotting tests, assay of factors V and VIII and on the hydrolysis of esters by thrombin and thrombokinase Roberts, Phyllis S.; Hughes, Haywood N.; Fleming, Patricia B. Med. Coll. Virginia, Virginia Commonw. Univ., Richmond, VA, USA Thrombosis and Haemostasis (1976), 35(1), 202-10 CODEN: THHADQ; ISSN: 0340-6245 Journal English 9-6 (Biochemical Methods) Section cross-reference(s): 13 Shorter clotting times were found in the presence of 50 mM Hepes (N-2-hydroxyethylpiperazine-N1-2-ethanesulfonic acid) buffer than of 50 mM imidazole buffer in 1-stage assays of factors V and VIII, in modified APTT (activated partial thromboplastin time) and PT (prothrombin times) tests and in tests of the clotting of human plasma by purified human thrombin. All tests were performed at ionic strength 0.155 in the presence of either Hepes, NaOH, or imidazole-HCl buffer, pH 7.4 at 37°. The faster clotting in the presence of Hepes buffer, therefore, is probably due, at least in part, to acceleration by Hepes of thrombin's enzymic action on fibrinogen and/or of the polymerization of the fibrin monomers. Hepes also may have effects on other blood clotting reactions. Rates of hydrolysis of TAME or BAME (p-toluenesulfonyl- or benzoyl-L-arginine Me ester) at pH 7.4, 37° by purified human or bovine thrombin were essentially the same in 200 mM Hepes as in 250 mM Tris-HCl buffer (rates in Hepes-NaOH or Hepes-KOH buffers were compared with those in Tris-HCl plus NaCl for KCl). However, with purified bovine thrombokinase, rates of TAME hydrolysis in Hepes buffer were accelerated and rates of BAME hydrolysis slightly inhibited.

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Hepes, therefore, reacts with thrombokinase but whether this accelerates

(or inhibits) the rate of converting prothrombin to thrombin remains to be determined In addition, Hepes has an inhibitory effect on clotting since increasing the concentration of Hepes from 50 mM to 200 mM inhibits clotting in the PT, APTT and bovine thrombin-human plasma tests. The clotting times were the same in the presence of 50 mM Tris-HCl as in imidazole-HCl buffers in APTT tests at 3 ionic strengths but they differed slightly in plasma-thrombin tests. Depending upon the ionic strength, 17 mM Na barbital-HCl buffer inhibited APTT tests but accelerated plasma-thrombin tests.

ST blood clotting test buffer effect

IT Buffer substances and systems

(blood-coagulation determination in relation to)

IT Blood coagulation

(determination of, buffer effects on)

IT 77-86-1 144-02-5 288-32-4 7365-45-9

RL: ANST (Analytical study)

(buffer, blood coagulation in presence of)

IT 9001-24-5 9001-27-8

RL: ANT (Analyte); ANST (Analytical study)

(determination of, buffer effects on)

IT 9002-04-4 9002-05-5

RL: RCT (Reactant); RACT (Reactant or reagent)
 (ester hydrolysis by, buffer effect on)

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